CUPC P100 Series User Manual

[P70 / P80/ P90 / P100 / P120]

[Version 1.5]

COMFILE TECHNOLOGY

COMFILE Technology Inc.

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Table of Contents

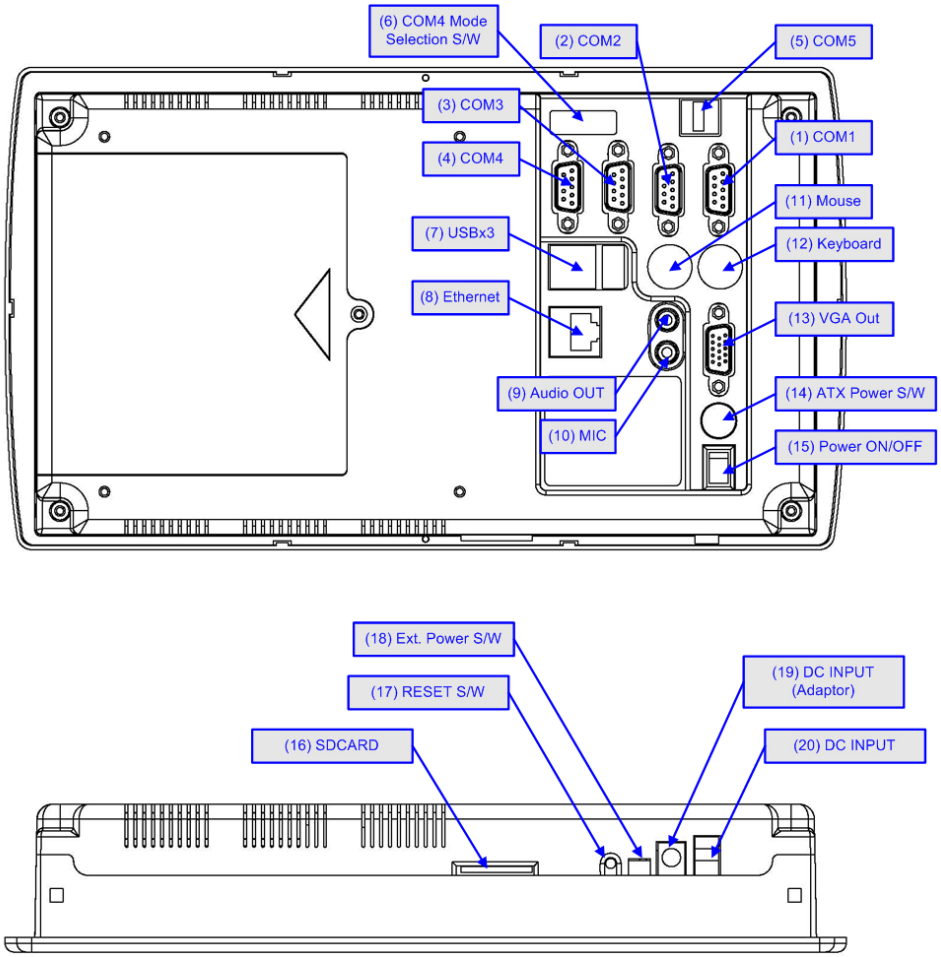
Chapter 1. hardware Specification 3
Chapter 2. Parts Diagram 4
Chapter 3. Dimensions 6
3-1. CUPC-P70 Dimensions 6
3-2. CUPC-P80 Dimensions 7
3-3. CUPC-P90 Dimensions 8
3-4. CUPC-P100 Dimensions 9
3-5. CUPC-P120 Dimensions 10
Chapter 4. PANEL CUTOUT 11
4-1. Installation Requirements and Installation 11
4-2. Bezel Size and Installation 12
Chapter 5. Bracket Installation 17
5-1. CUPC-P80 Bracket Installation 17
5-2. CUPC-P90 Bracket Installation 17
5-3. CUPC-P100 Bracket Installation 19
5-4. CUPC-P120 Bracket Installation 20
Chapter 6. Input/Output Connector Type and Pin Assignment 21
6-1. VGA Output Connector 21
6-2. RS232C Input/Output Connector (COM1,COM2,COM3) 21
6-3. COM4 Mode Setting and Connector 22
6-4. RS485 Input/Output Connector (COM5) 23
6-5. Ext. Power ON/OFF Switch Connector 23
6-6 Power Input Connector 24
Chapter 7. System Restoration 25
7-1. Getting Ready 25
7-2. ROM Bios Configuration 26
7-2-1. Changing First Boot Device 26
7-4. Restoration 28
7-5. Backing Up 34
MEMO 40

Chapter 1. hardware Specification

ITEM	MODEL				
	CUPC-P70	CUPC-P80	CUPC-P90	CUPC-P100	CUPC-P120
CPU	AMD Geode LX800 500MHz Process Support MMX, AMD 3DNOW Instruction set				
Chipset	AMD LX800 & CS5536 Companion Chip				
BIOS	Award Bios				
Display Chipset	AMD LX800 Geode Integrated Graphics Controller High Performance 2D Accelerator VGA CRT Output Port				
LCD	7inch (800x480) 300cd/m^2	10.2inch (800x480) 350cd/m^2	10.4inch (1024x768) 300cd/m^2	15inch (1024x768) 250cd/m^2	
Backlight	White LED Lifetime : >20,000hr	White LED Lifetime : >20,000hr	1 Channel CCFL Lifetime : >30,000hr	2 Channel CCFL Lifetime : >40,000hr	
Ethernet	10/100 Base-T Ethernet Port VIA VT6107 Ethernet Controller Chip				
Audio	VT1616 AC97 Codec Speaker Out Port. MIC In Port				
USB	3 Universal Serial Bus Support Support USB2.0 Host Controller				
SDCARD	1 slot Support				
Keyboard	PS/2 Keyboard Port				
Mouse	PS/2 Mouse Port				
HDD	Embedded FALSH Disk(4GB), S-ATA Support				
Serial	4 RS232C Serial Port.(COM4 RS232 & RS485 S/W Select Port) One RS485 Serial Port.(Auto Direction Control Support)				
Input Power	DC+12V		DC+14V		
Power Consumption	<12W (1.0A@DC+12V)	<15W (1.2A@DC+12V)	<17W (1.2A@DC+14V)	<22W (1.6A@DC+14V)	
Weight	0.67Kg	1.1Kg	1.8Kg	4.8Kg	4.5Kg
Operating Temperature	$0^0C \sim 60^0C$			$0^0C \sim 50^0C$	

[Table 1] CUPC Hardware Specification

Chapter 2. Parts Diagram



[Figure 1] CUPC Parts Diagram

	Name	Description
1	COM1	RS232C Port
2	COM2	RS232C Port
3	COM3	RS232C Port
4	COM4	RS232C/RS485 Port. => Switched to RS232C or RS485 by the mode selector.[1]
5	COM5	RS485 port. [2]
6	COM4 Mode Selection S/W	Switch for selecting COM4 mode. (Refer to Chapter 2-3)
7	USB	Provides 3 USB ports (USB2.0).

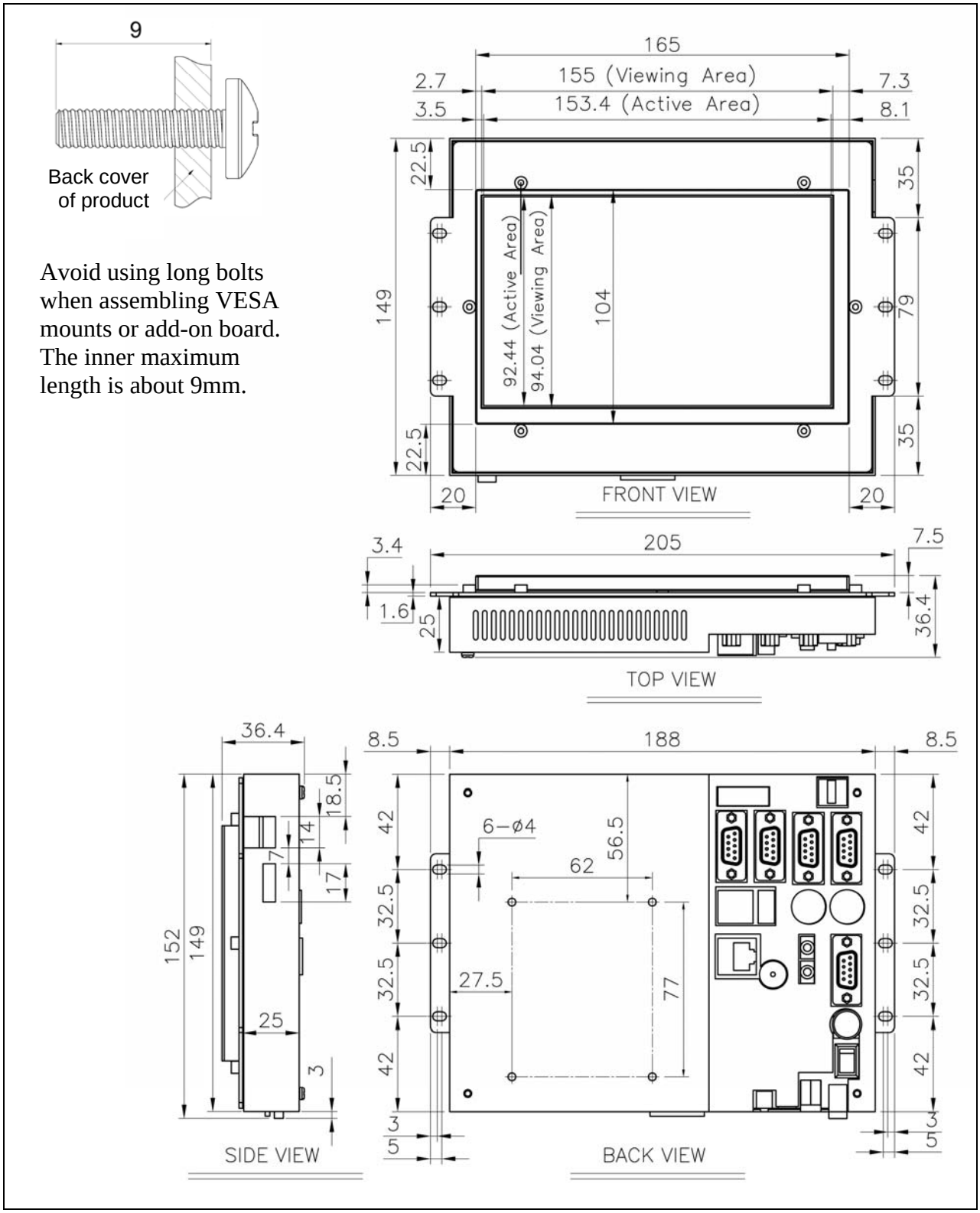
[1] When using RS485 mode, no other RTS signal control is needed because Auto Direction Control is supported.
[2] No other RTS signal control is needed because Auto Direction Control is supported.

8	Ethernet	10/100Base-T Ethernet Port (1EA)
9	Audio OUT	Stereo sound output port
10	MIC	Microphone input port.
11	Mouse	PS/2 mouse input port.
12	Keyboard	PS/2 keyboard input port.
13	VGA Out	External monitor video output port
14	ATX Power S/W	ATX mode power switch, which can turn on and off the system.[3]
15	Power ON/OFF	Power ON/OFF switch.
16	SD Card	SDCARD slot for OS recovery. (CAUTION : Use only for OS recovery)
17	RESET S/W	Reset switch.
18	Ext. Power S/W	The connector which can be linked to external switch. Same function with ATX Power S/W.
19	DC INPUT(Adaptor)	Connector for adaptor power supply.
20	DC INPUT	Connector for power supply.

[3] CUPC is released on AT power mode. If you need ATX power mode, please contact us.

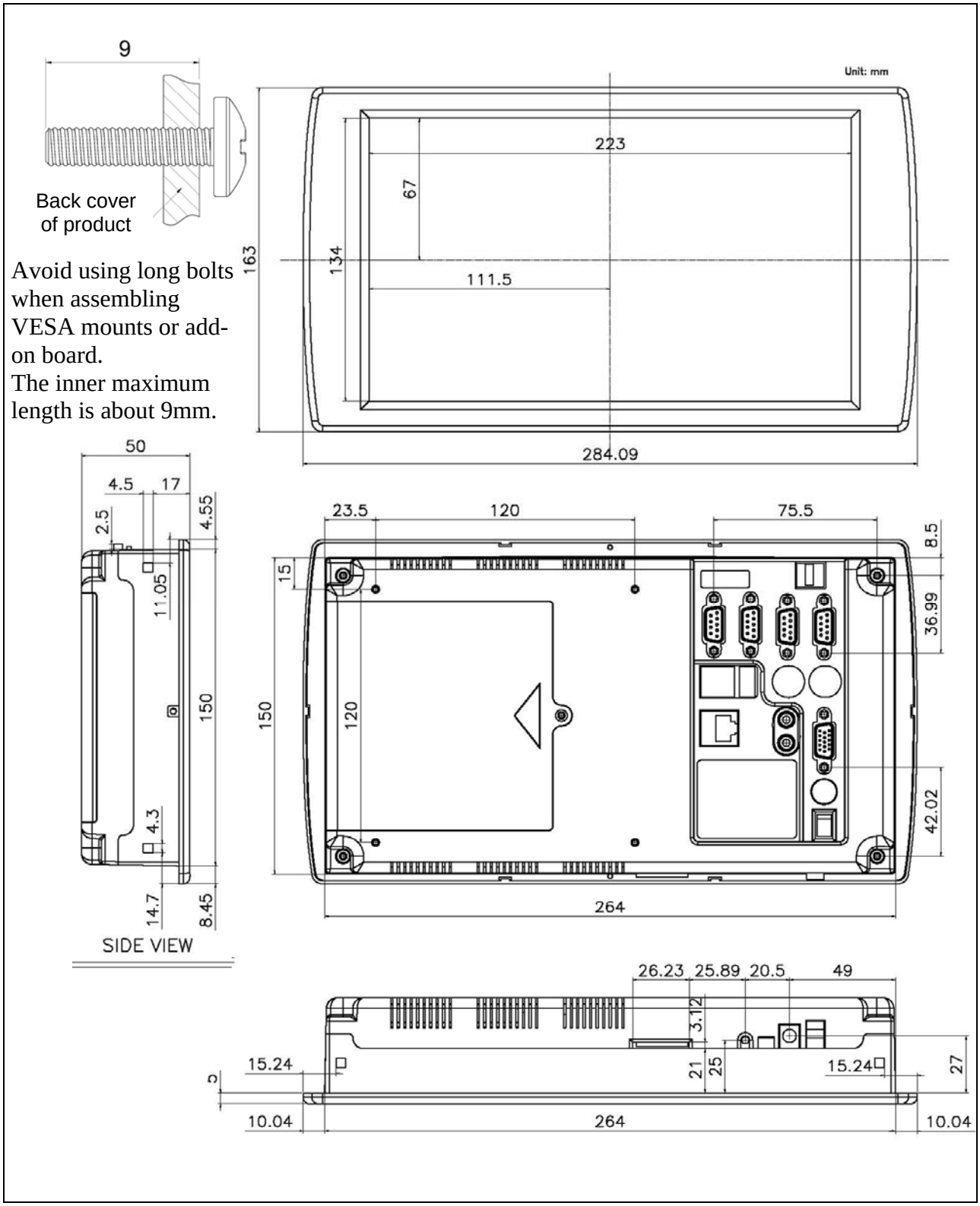
Chapter 3. Dimensions

3-1. CUPC-P70 Dimensions



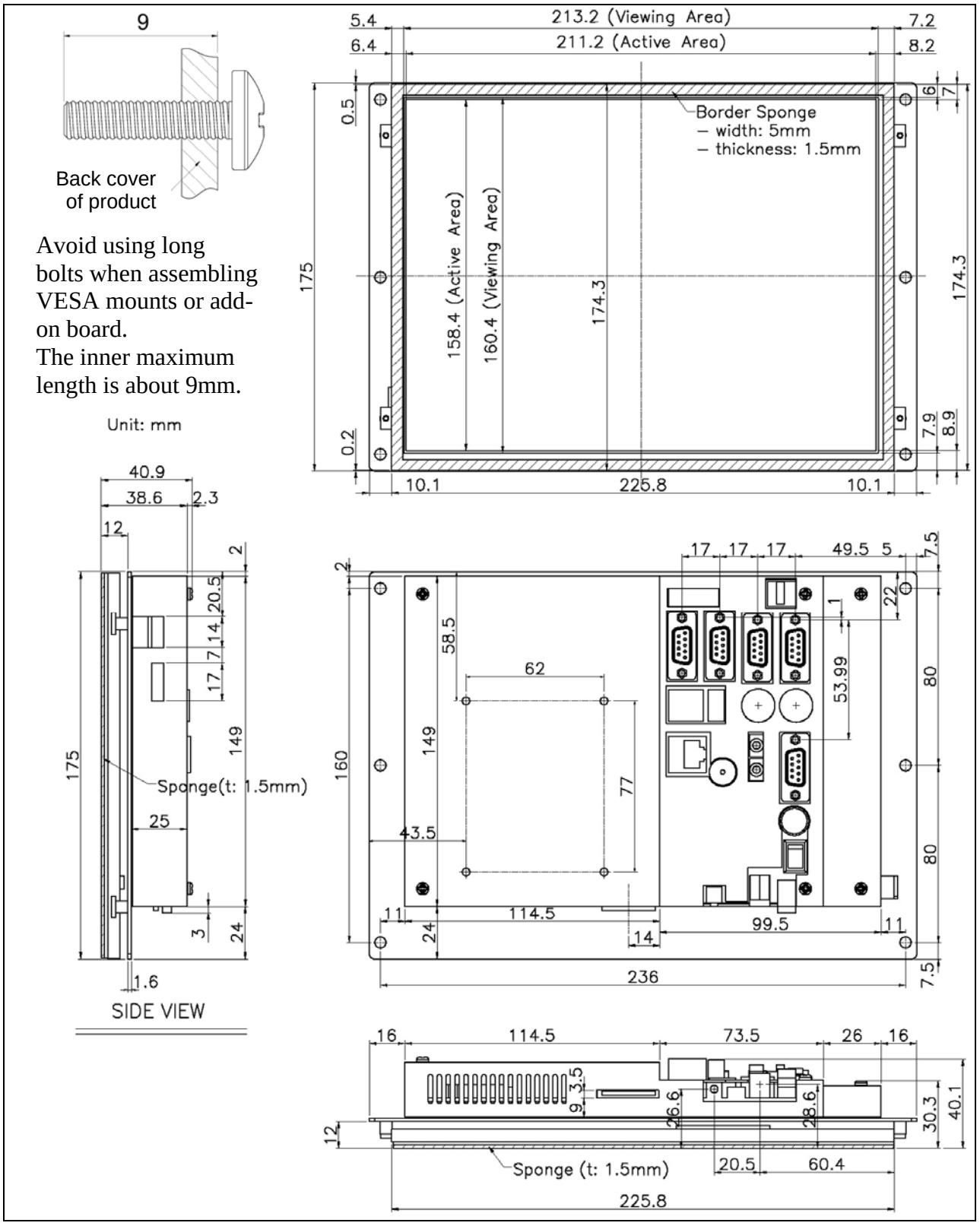
[Figure 2] CUPC-P70 Dimensions

3-2. CUPC-P80 Dimensions



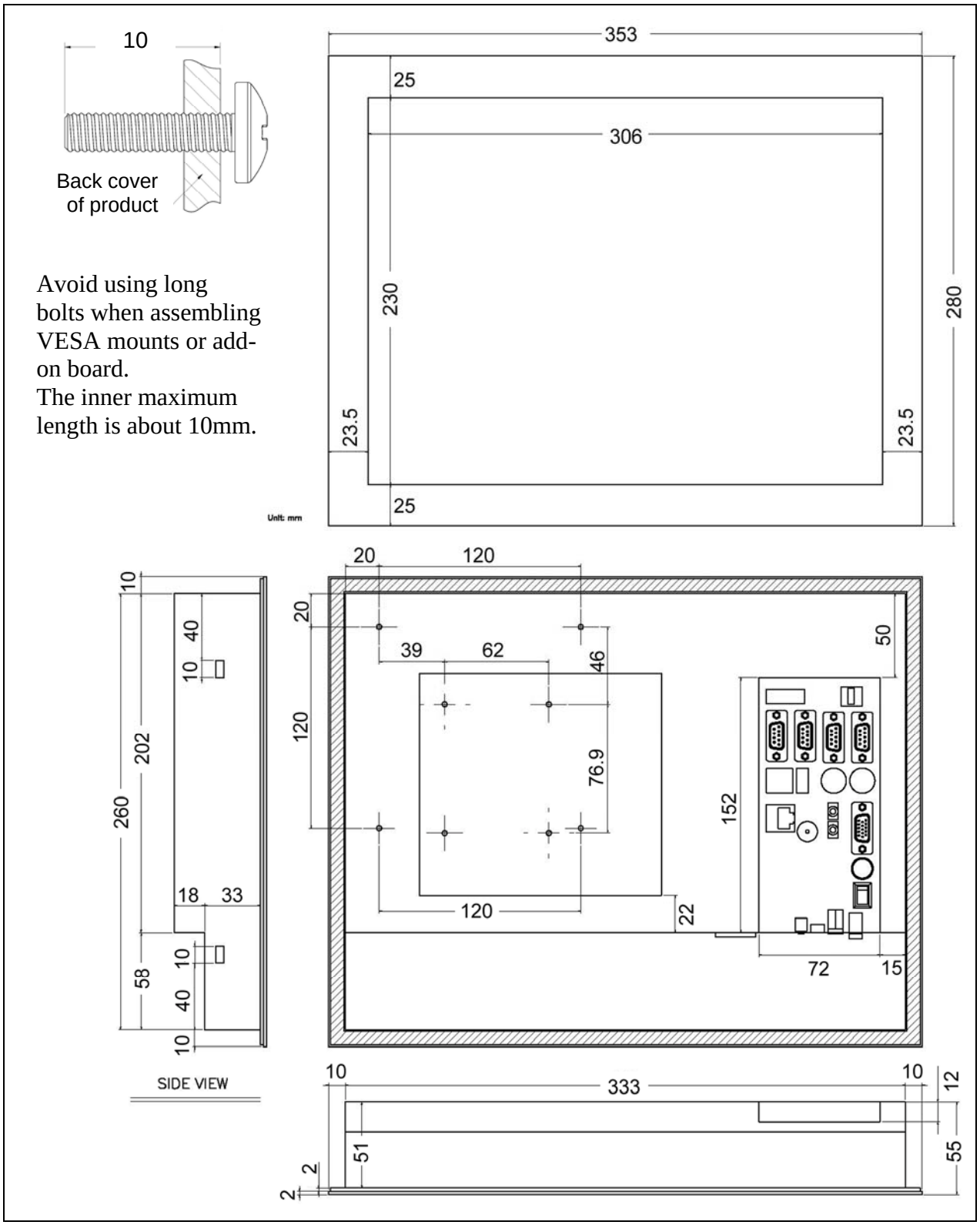
[Figure 3] CUPC-P80 Dimensions

3-3. CUPC-P90 Dimensions



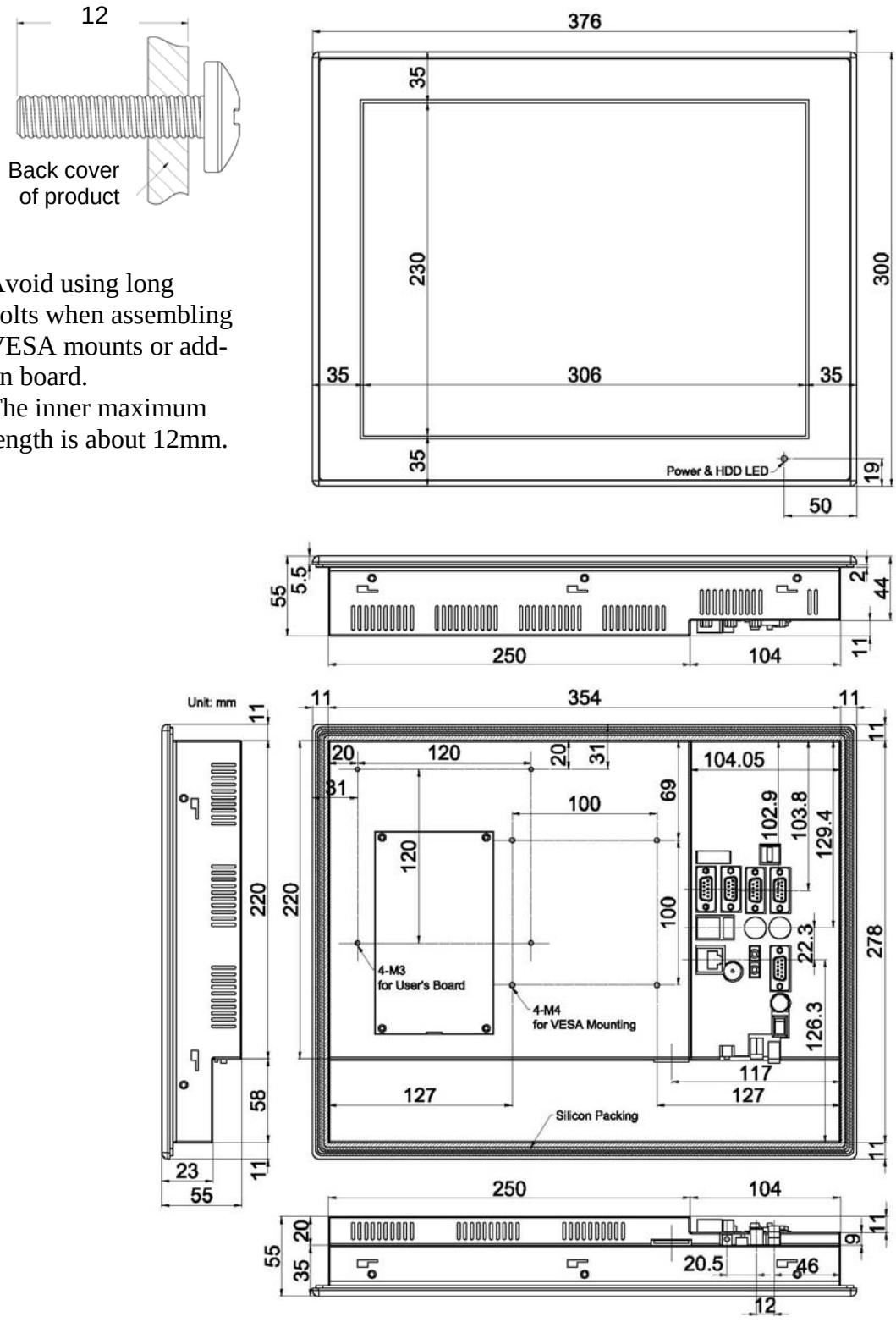
[Figure 4] CUPC-P90 Dimensions

3-4. CUPC-P100 Dimensions



[Figure 5] CUPC-P100 Dimensions

3-5. CUPC-P120 Dimensions

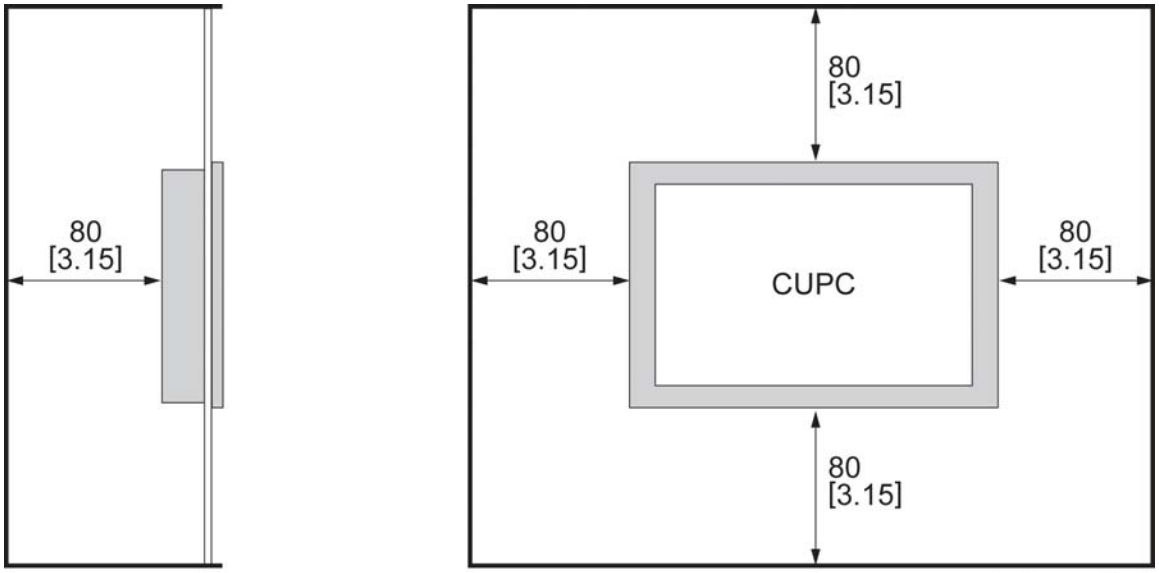


[Figure 6] CUPC-P120 Dimensions

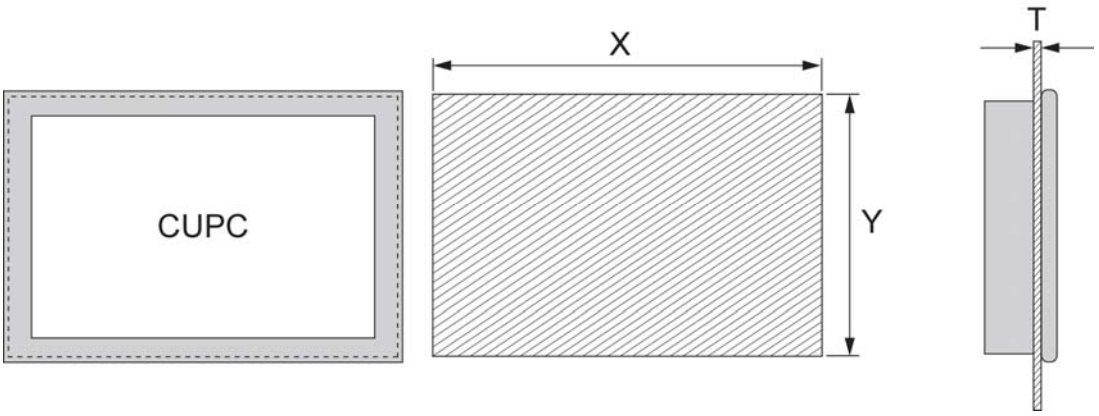
Chapter 4. PANEL CUTOUT

4-1. Installation Requirements and Installation

[Installation Requirements]

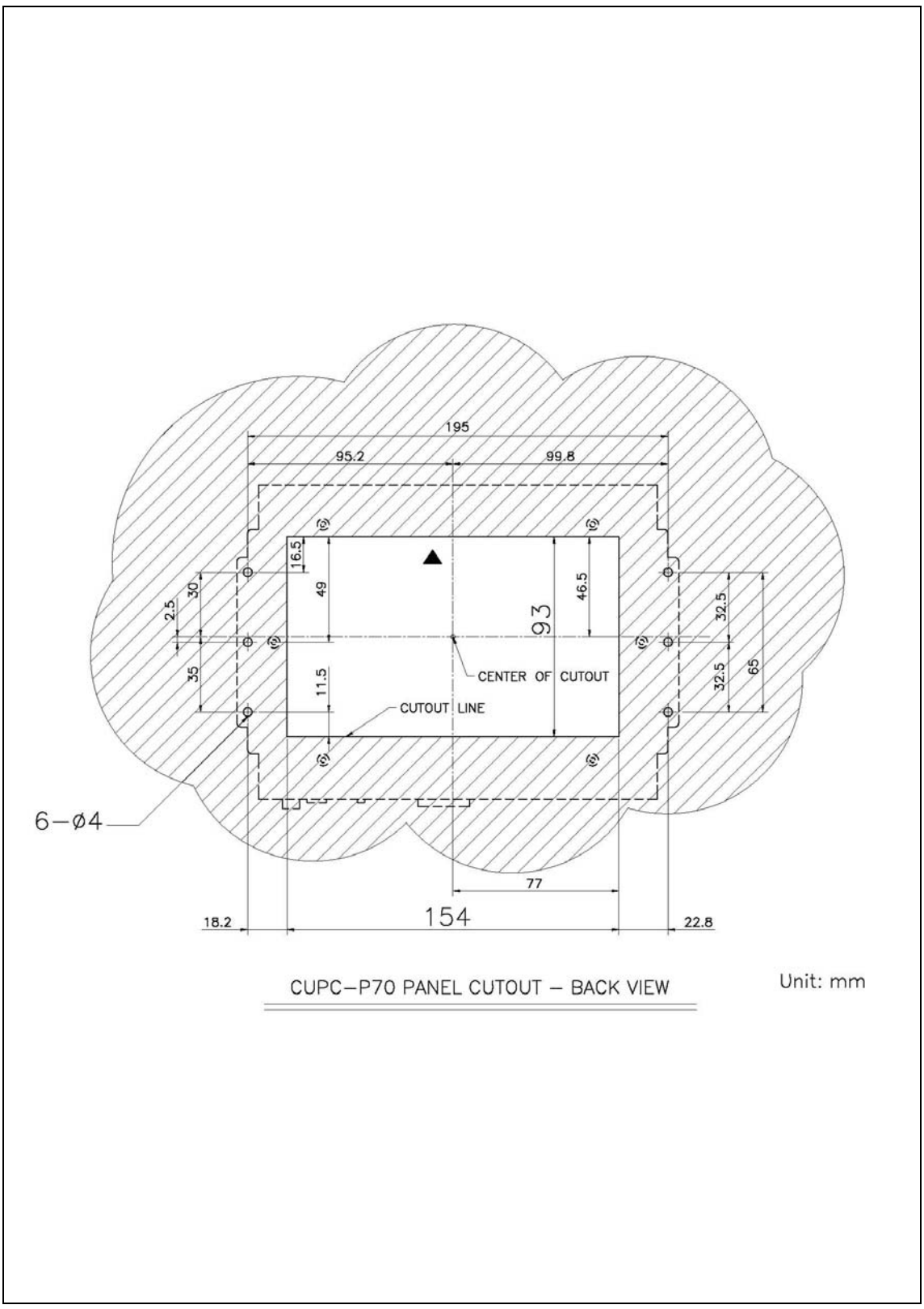


[Installation]

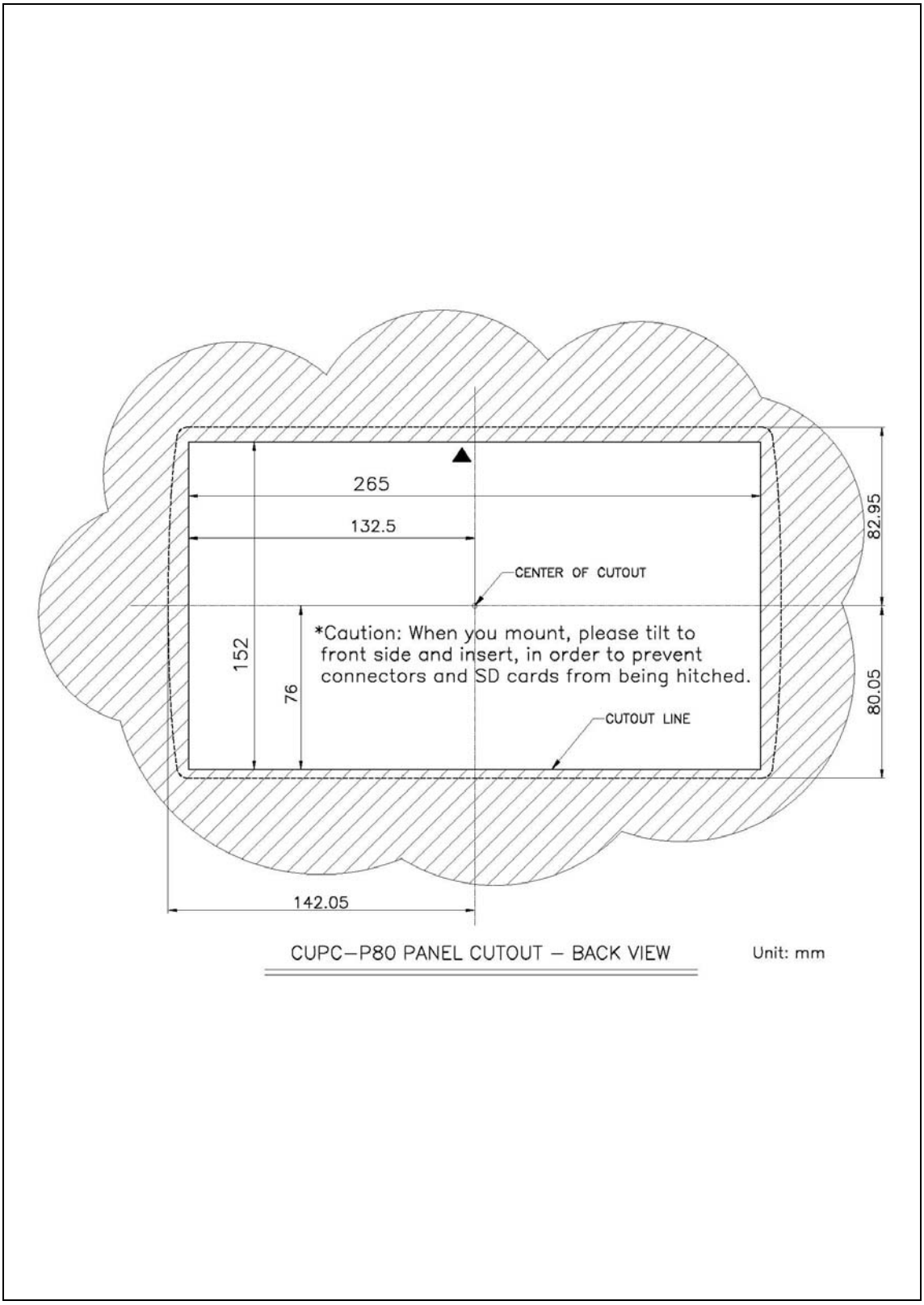


CUPC	X (Width)	Y (Height)	T (Thickness)	Unit
P70	154 [6.06]	93 [3.66]	1.6 to 5.0 [0.06 to 0.20]	mm [inch]
P80	265 [10.44]	152 [5.99]	1.6 to 5.0 [0.06 to 0.20]	mm [inch]
P90	212 [8.34]	159 [6.25]	1.6 to 5.0 [0.06 to 0.20]	mm [inch]
P100	335 [13.19]	262 [10.32]	1.6 to 15.0 [0.06 to 0.59]	mm [inch]
P120	335 [13.19]	279 [10.99]	1.6 to 6.0 [0.06 to 0.24]	mm [inch]

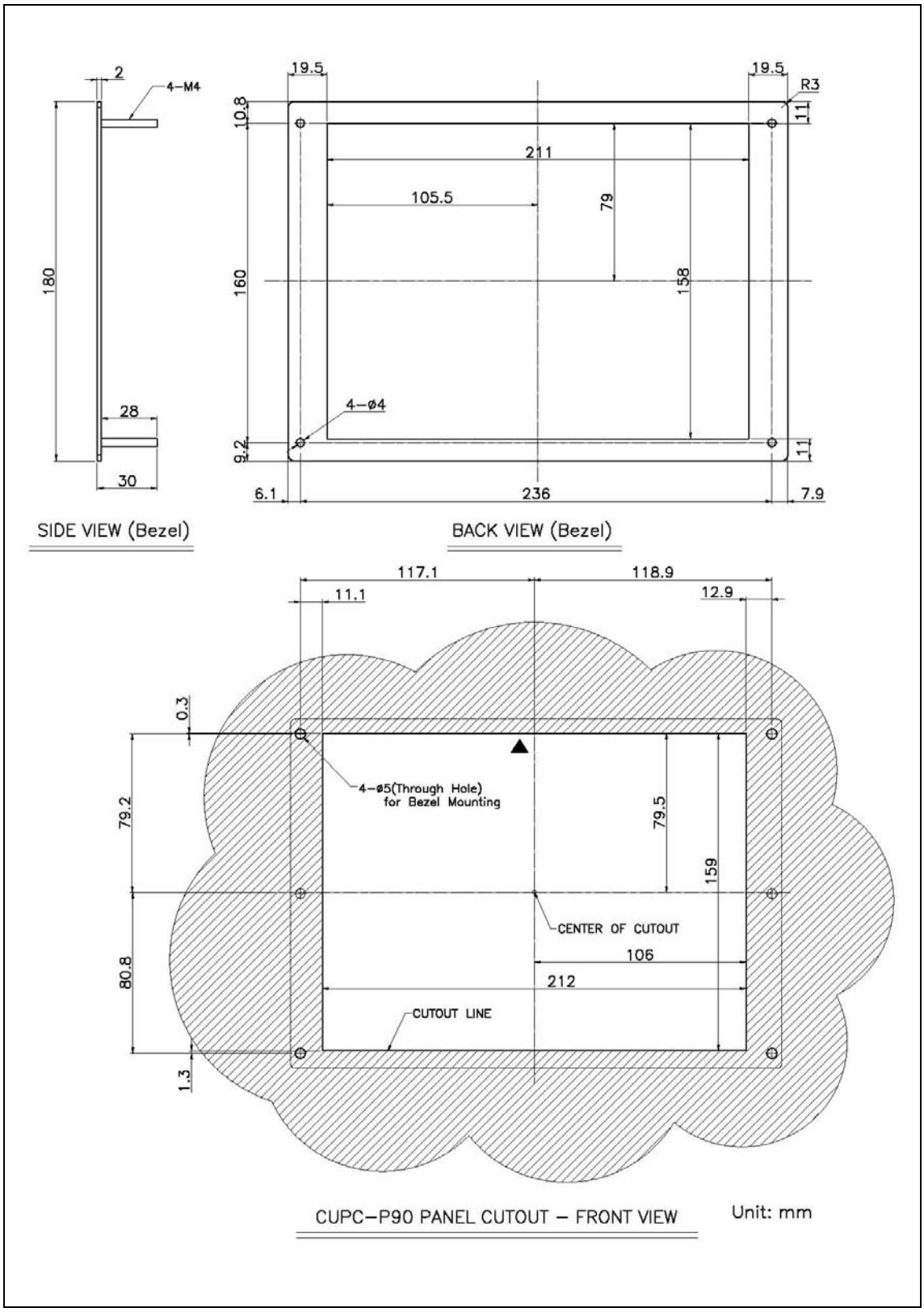
4-2. Bezel Size and Installation



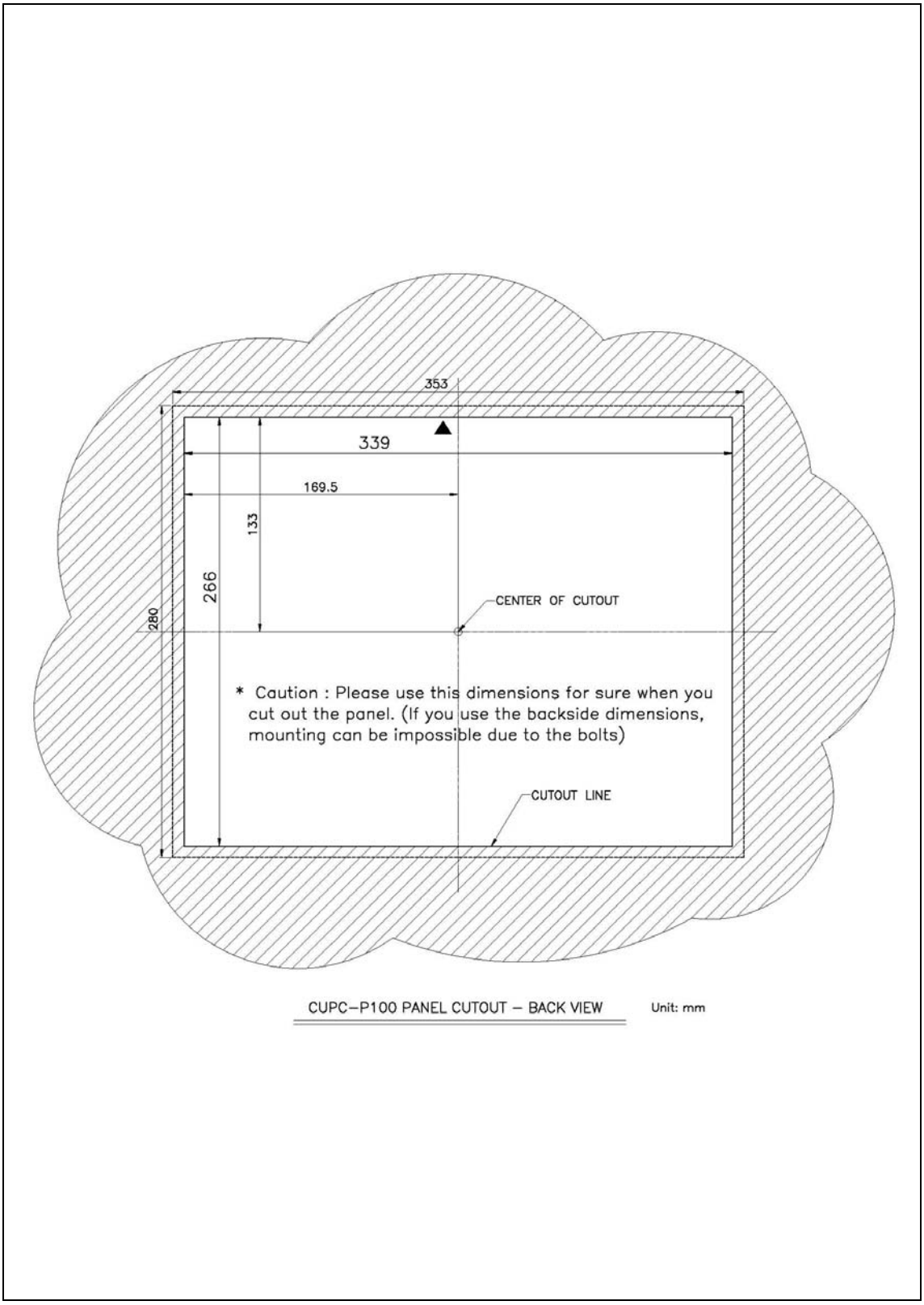
[Figure 7] CUPC-P70 Panel Cutout size



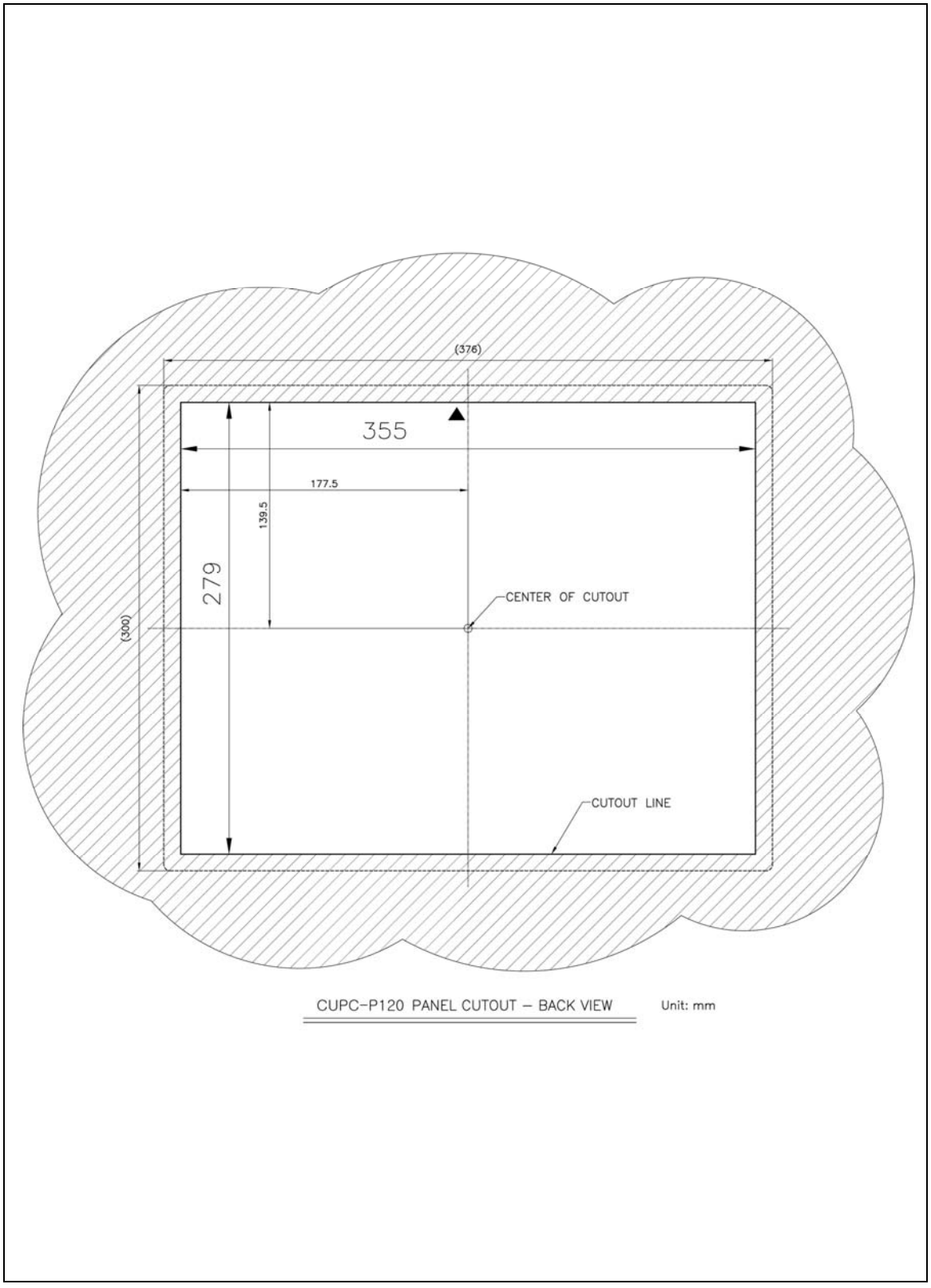
[Figure 8] CUPC-P80 Panel Cutout size



[Figure 9] CUPC-P90 Panel Cutout size


353
339
169.5
133
266
280
CENTER OF CUTOUT
* Caution : Please use this dimensions for sure when you cut out the panel. (If you use the backside dimensions, mounting can be impossible due to the bolts)
CUTOUT LINE
CUPC-P100 PANEL CUTOUT – BACK VIEW
Unit: mm

[Figure 10] CUPC-P100 Panel Cutout size

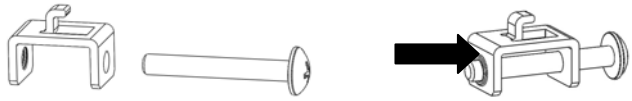


[Figure 11] CUPC-P120 Panel Cutout size

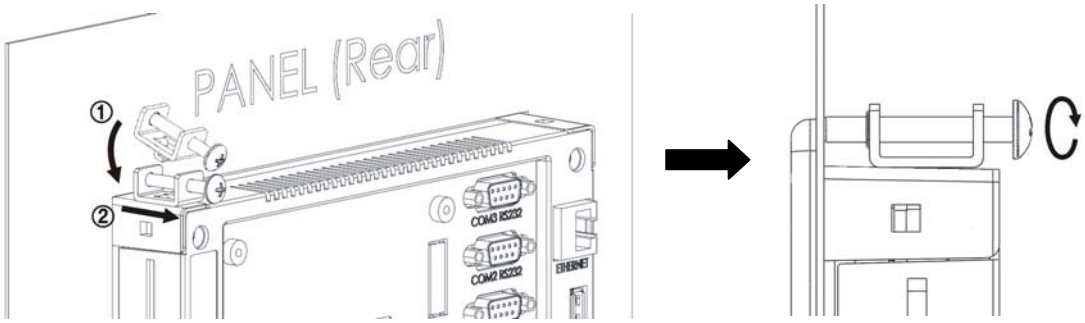
Chapter 5. Bracket Installation

5-1. CUPC-P80 Bracket Installation

1. Insert a bolt into each mounting bracket as shown in the diagram below.

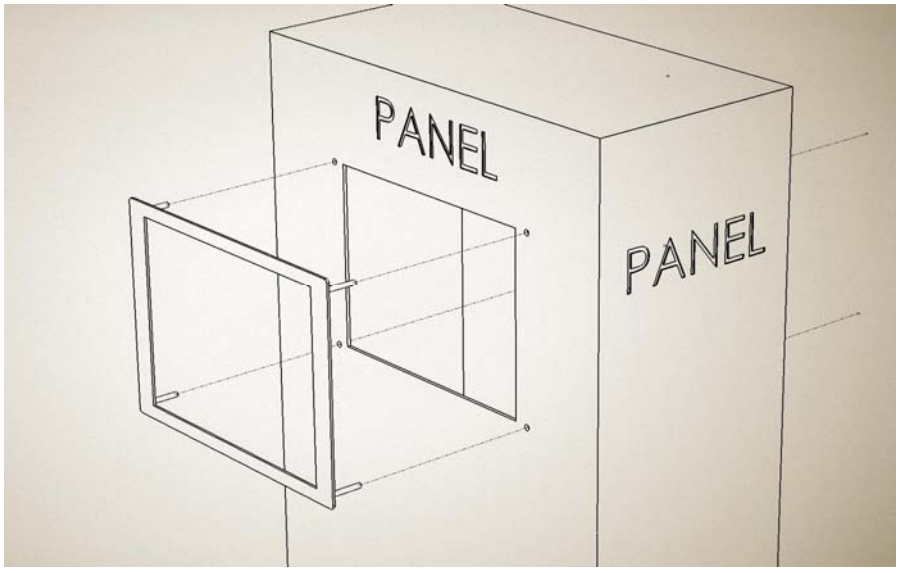


2. Make a hole in the panel according to the CUPC's cutout diagram, and insert the CUPC into place.
3. Hook a bracket into one of the CUPC's bracket mounting holes, and pull gently to hold it firmly in place.
4. Tighten the bolt against the panel to secure the CUPC to the panel. (Be careful not to tighten the bolts too tightly, or the CUPC could be damaged.)
5. Repeat steps 3 and 4 for each mounting bracket.

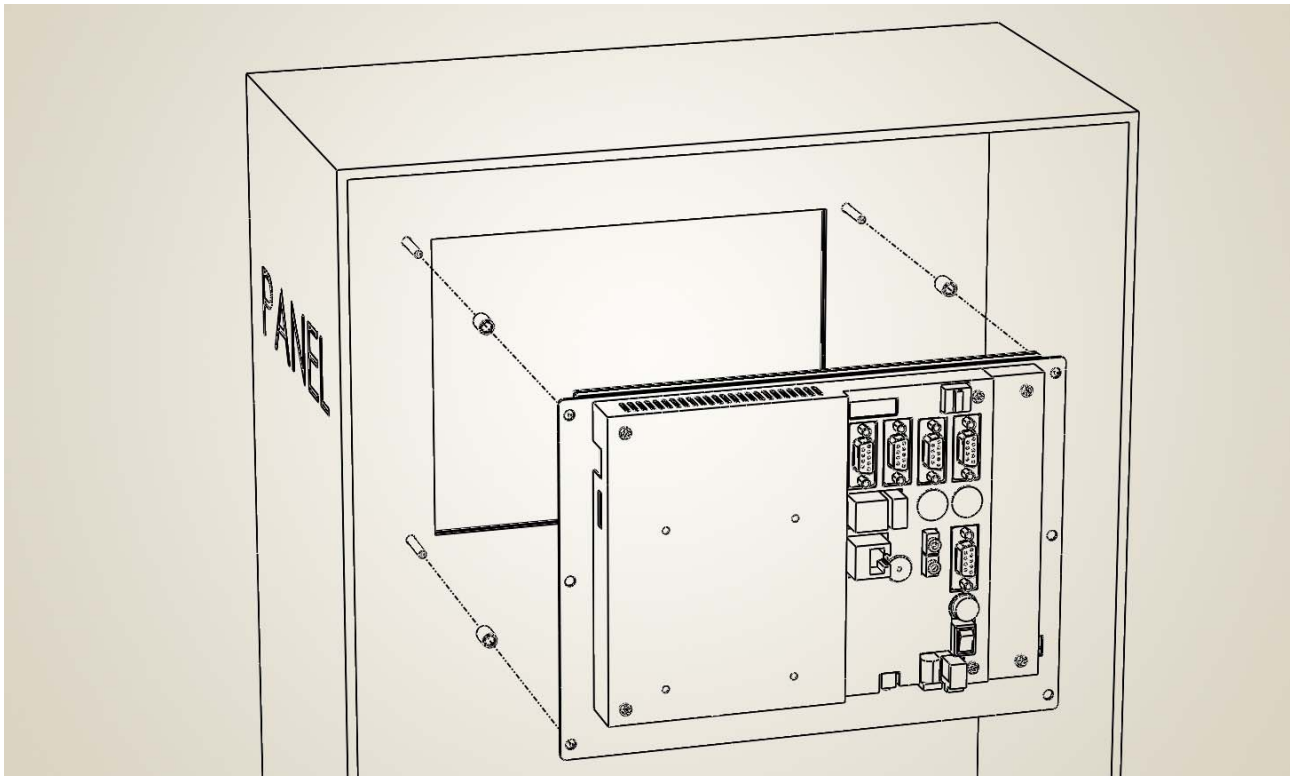


5-2. CUPC-P90 Bracket Installation

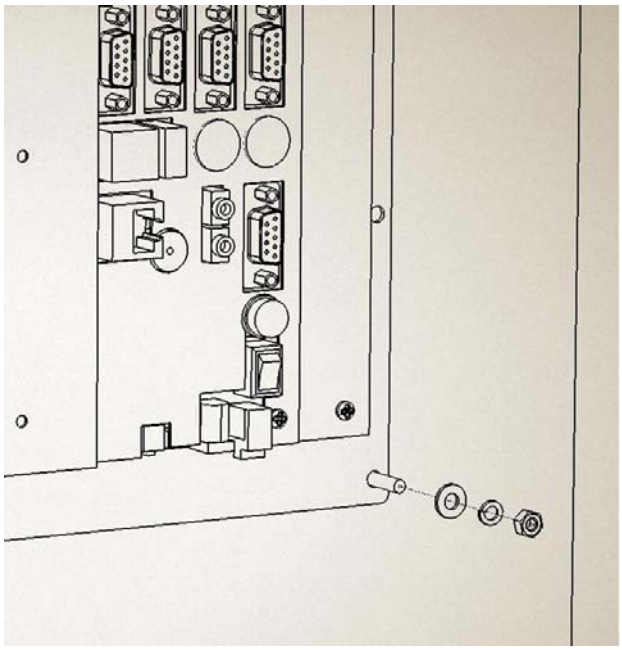
1. Make holes and a rectangle in your panel.
2. Insert the bezel from the front side of your panel.
   (The bezel has directions of upside and downside. Refer to the "▲ Upside" mark at the rear side of bezel)



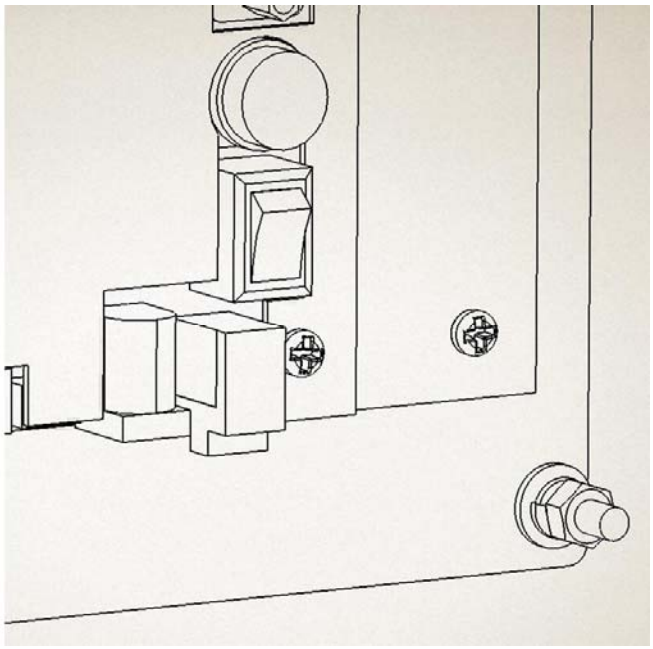
3. At the rear side of your panel, combine each spacer with 4 bezel bolts and insert them into CUPC. (The spacers are for protecting the touch screen)



4. Install washers and nuts at the 4 bezel bolts, and tighten the CUPC.
   The order is flat washer, spring washer, and then nut. (Do not tighten too tightly, or it may damage the touch pad.)



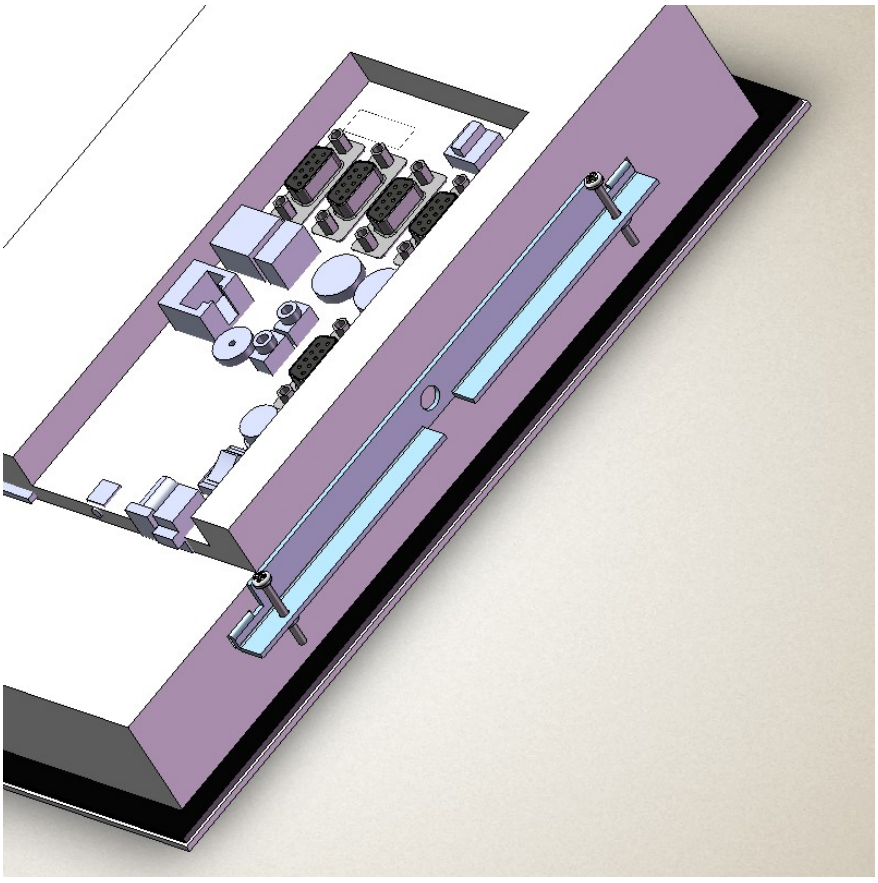
Before, Washer and Nut Assy. (Back Panel)



After, Washer and Nut Assy. (Back Panel)

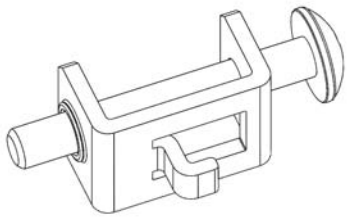
5-3. CUPC-P100 Bracket Installation

When you purchase the product, the bracket for installing P100 to the front panel is provided.
After mounting the CUPC to the panel, insert the bracket to the side of product and tighten with the bolts.



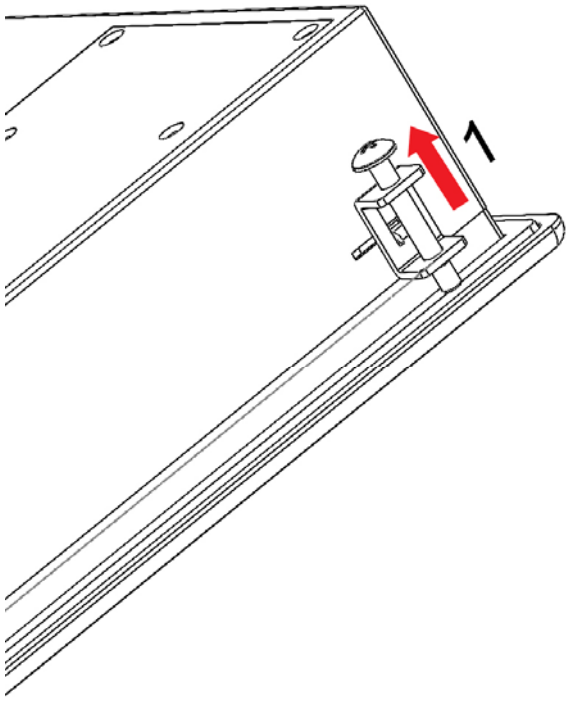
5-4. CUPC-P120 Bracket Installation

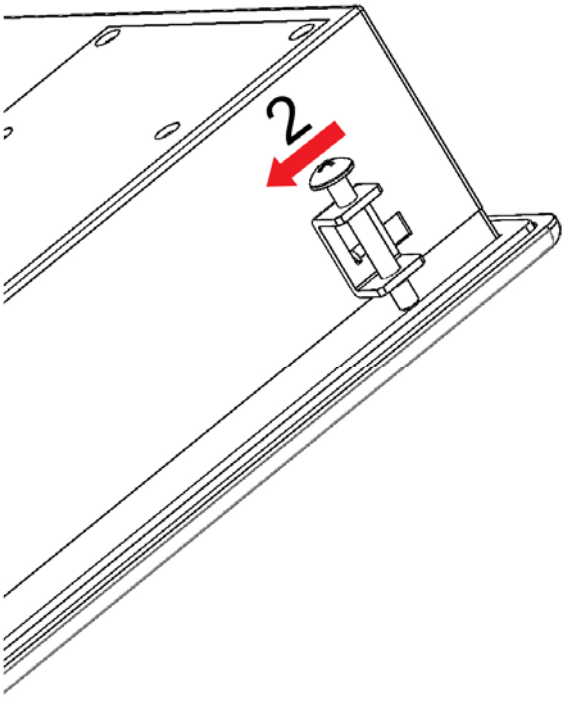
To fasten CUPC-P120 to an upright panel, the brackets (left 2ea, right 2ea) are supplied when you purchase P120.



* Procedure *

1) Push and install the CUPC-P120 into your panel.
2) Press the bracket as the following directions in two steps.

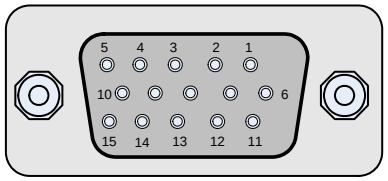




3) To fix the CUPC-P120 to the panel, fasten the bolts.

Chapter 6. Input/Output Connector Type and Pin Assignment

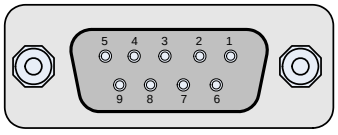
6-1. VGA Output Connector

Connector Type

* D-SUB 15 Pin Female

Pin Assignment			
Pin No.	Signal	Pin No.	Signal
1	RED	2	GREEN
3	BLUE	4	-
5	GND	6	AGND
7	AGND	8	AGND
9	+5V	10	GND
11	-	12	DDDATA
13	HSYNC	14	VSYNC
15	DDCLK	-	-

[Table 2] VGA Output Connector Type and Pin Assignment

6-2. RS232C Input/Output Connector (COM1,COM2,COM3)

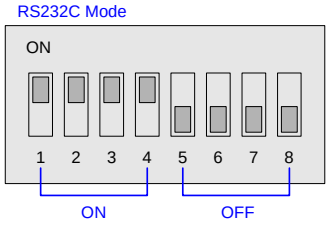
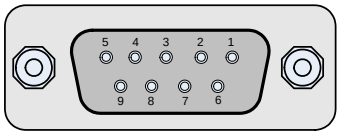
Connector Type

*D-SUB 9Pin Female

Pin Assignment			
Pin No.	Signal	Pin No.	Signal
1	DCD	2	RXD
3	TXD	4	DTR
5	GND	6	DSR
7	RTS	8	CTS
9	RI	-	-

[Table 3] RS232C Input/Output Connector Type and Pin Assignment

6-3. COM4 Mode Setting and Connector

6-3-1. RS232C Mode

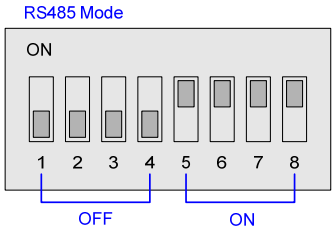
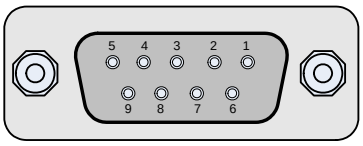
Mode Setting	Connector Type
	 *D-SUB 9 Pin Female

Pin Assignment			
Pin No.	Signal	Pin No.	Signal
1	DCD	2	RXD
3	TXD	4	DTR
5	GND	6	DSR
7	RTS	8	CTS
9	RI	-	-

[Table 4] COM4 Connector Type and Pin Assignment for RS232C mode

6-3-2. RS485 Mode

* AutoDirection Control is supported so no other RTS Signal Control required.

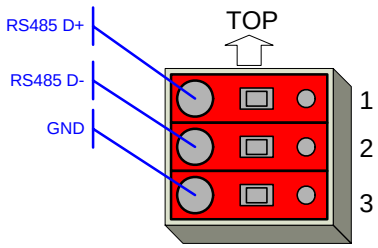
Mode Setting	Connector Type
	 *D-SUB 9 Pin Female

Pin Assignment			
Pin No.	Signal	Pin No.	Signal
1	-	2	RS485 DATA+
3	RS485 DATA-	4	-
5	GND	6	-
7	-	8	-
9	-	-	-

[Table 5] COM4 Connector Type and Pin Assignment for RS485 mode

6-4. RS485 Input/Output Connector (COM5)

* AutoDirection Control is supported so no other RTS Signal Control required.

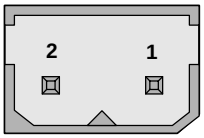
Connector Type


Pin Assignment	
Pin No.	Signal
1	RS485 DATA+
2	RS485 DATA-
3	GND

[Table 6] COM5 Connector Type and Pin Assignment

6-5. Ext. Power ON/OFF Switch Connector

* CUPC is released on AT power mode. If you want ATX, please contact us.

Connector Type


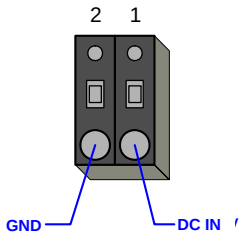
* Part No. : YMW025-02R

Mating Connector : YMH025-02R

Pin Assignment	
Pin No.	Signal
1	PWRBTN#
2	GND

[Table 7] Ext. Power ON/OFF Switch Type and Pin Assignment

6-6 Power Input Connector

Connector Type


Pin Assignment	
Pin No.	Signal
1	DC IN
2	GND

[Table 8] Power Input Connector Type and Pin Assignment

CAUTION

- Make sure the power supply is turned off when you begin wiring.
- Before you turn on the power supply, please check the voltage of power supply and wiring is all ok.

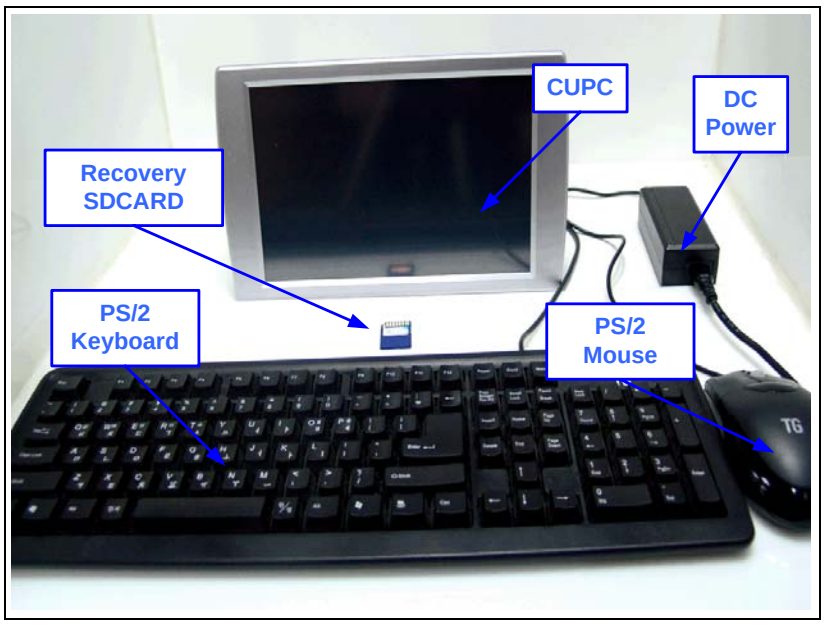
Chapter 7. System Restoration

CUPC provides a system restoration solution using Clonix's WinClon, which is included when you purchase the OS Option Package. You can restore the CUPC to its original state or to any state you may have saved using the backup procedure.

7-1. Getting Ready

In order to perform the restoration procedure, the following is needed.

- CUPC
- WinClon Recovery SDCARD
- Keyboard & Mouse (* PS/2 Type is recommended.)
- DC Power



[Figure 12] Getting Ready

Please be sure to use the recovery SDCARD with the WinClon logo.

[Figure 13] Recovery SDCARD

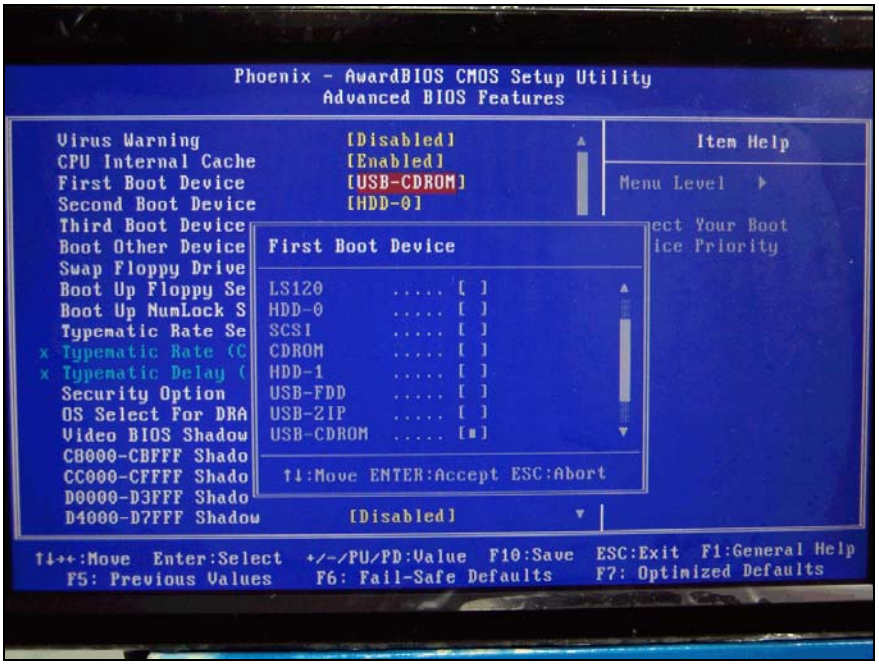
7-2. ROM Bios Configuration

7-2-1. Changing First Boot Device

After turning on the power, if you press the [DEL] key on the initial screen, the BIOS Setup Utility will open as shown in Figure 12.

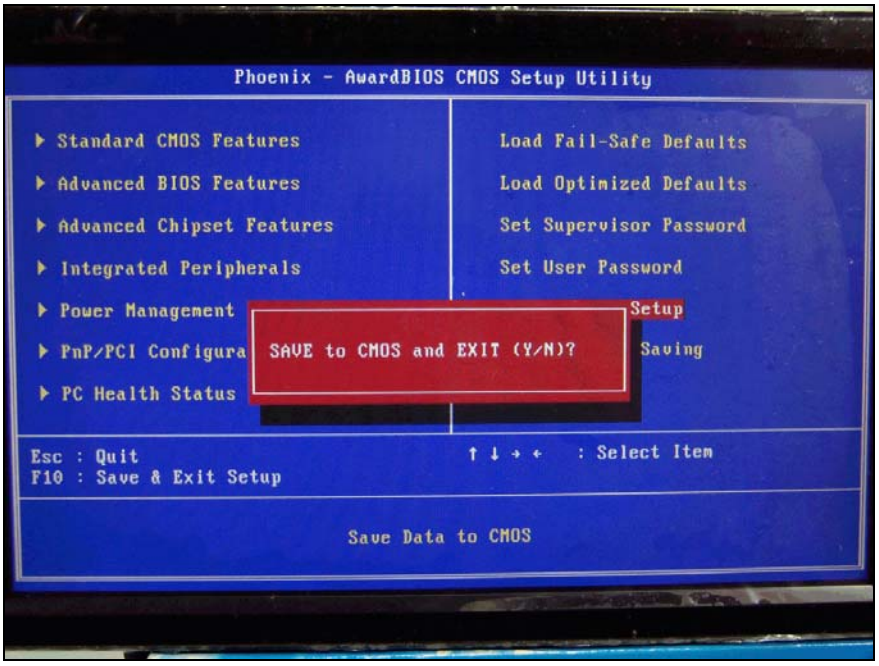
[Figure 14] BIOS SETUP Initial Screen

Select the [Advanced BIOS Features] menu.



[Figure 15] Advanced BIOS Features menu

Choose [USB-HDD] as the First Boot Device.



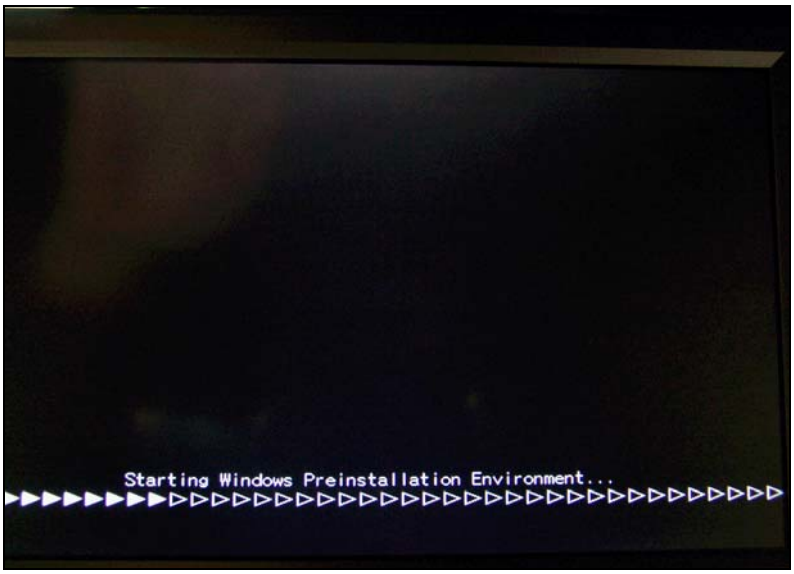
[Figure 16] BIOS SETUP Save & Exit Screen

Select the Save & Exit Setup option from the menu and confirm your selection by Pressing the Y Key. The system will then reboot.

7-3. Booting with the WinClon SDCARD

Insert the WinClon Recovery SDCARD and turn on the power.

The System will begin booting into Windows PE as shown in [Figure15].



[Figure 17] WinPE Booting Screen

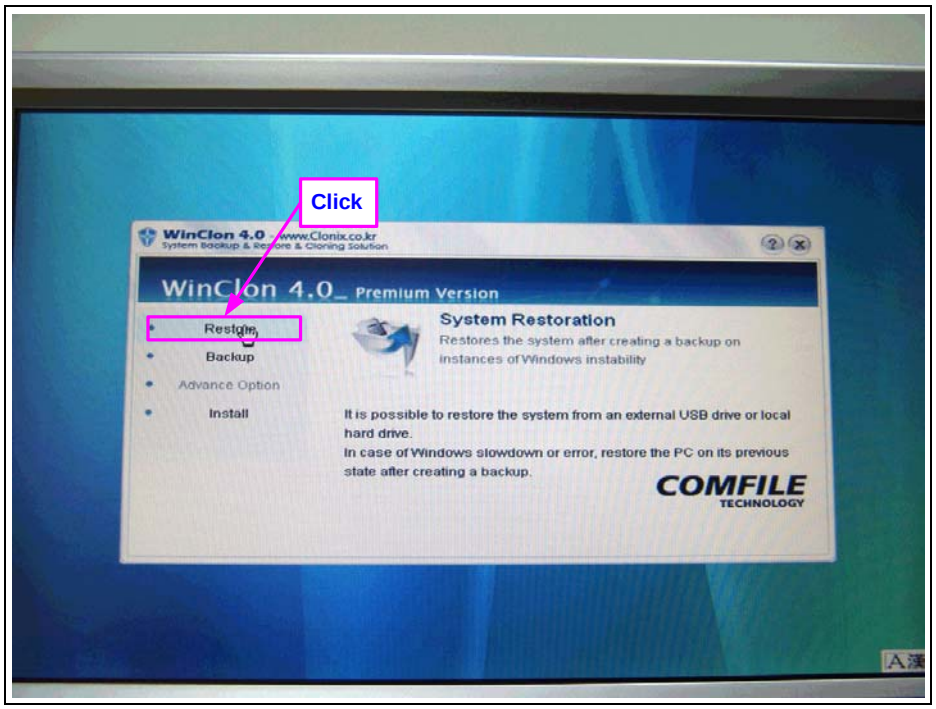
After the system boots into Windows PE, WinClon will be executed as shown in [Figure 16]

WinClon 4.0 - www.Clonix.co.kr
System Backup & Restore & Cloning Solution
WinClon 4.0_ Premium Version
Restore
Backup
Advance Option
Install
System Restoration
Restores the system after creating a backup on instances of Windows instability
It is possible to restore the system from an external USB drive or local hard drive.
In case of Windows slowdown or error, restore the PC on its previous state after creating a backup.
COMFILE TECHNOLOGY

[Figure 18] WinClon Initial Screen

7-4. Restoration

On the initial WinClon screen, click 'Restore'.


Click
WinClon 4.0 - www.Clonix.co.kr
System Backup & Restore & Cloning Solution
WinClon 4.0_ Premium Version
Restore
Backup
Advance Option
Install
System Restoration
Restores the system after creating a backup on instances of Windows instability
It is possible to restore the system from an external USB drive or local hard drive.
In case of Windows slowdown or error, restore the PC on its previous state after creating a backup.
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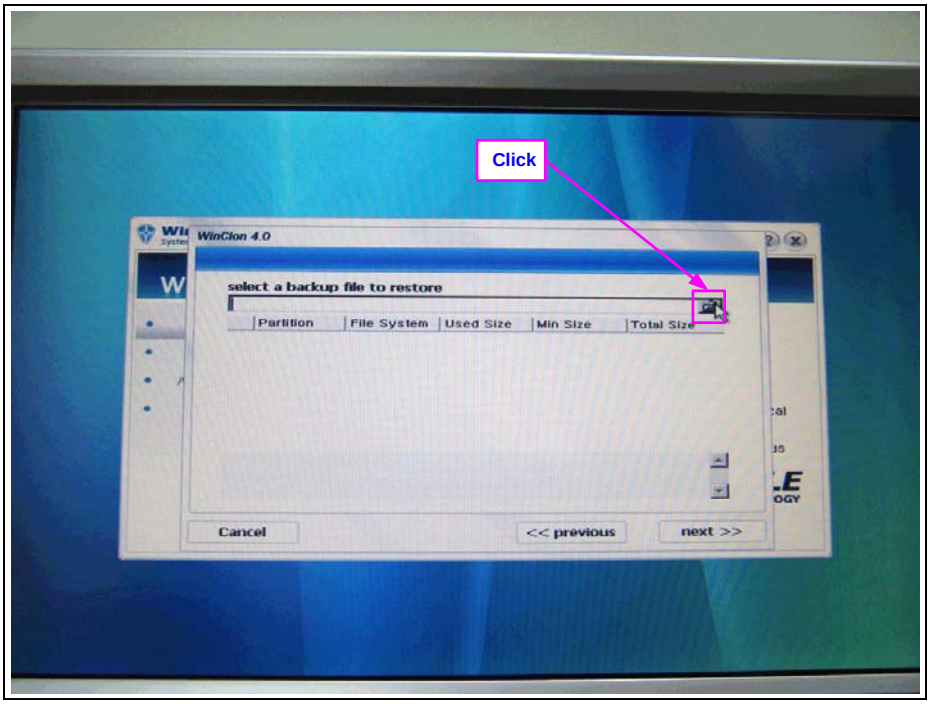
[Figure 19] Restoring Menu Selection

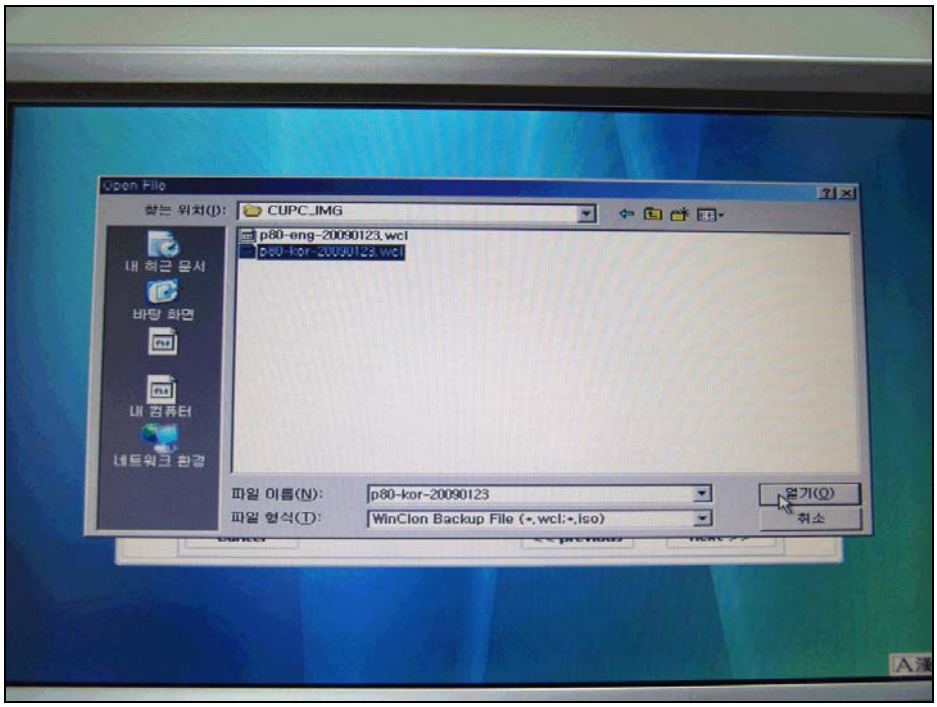
Select the restoration image according to the following steps.



[Figure 20] Selecting Image

Click on the folder icon.

[Figure 21] Exploring image file

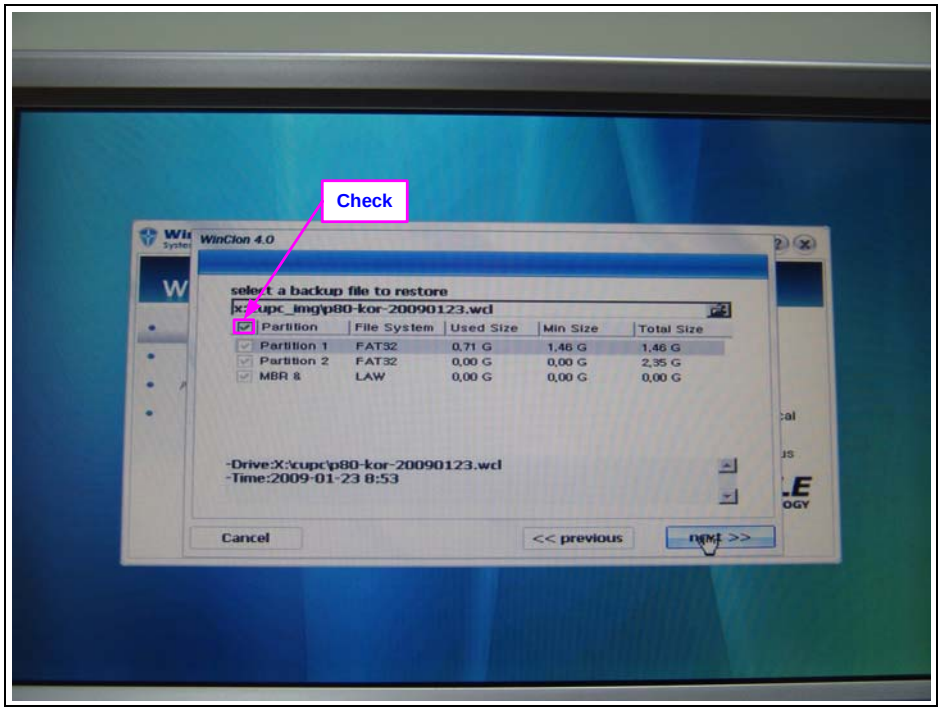


[Figure 22] Select image file

In the SD card you purchased, you will find an initial restoration image named by CUPC model. If you have performed a backup, you may see your own image, too. Select an image from the list.

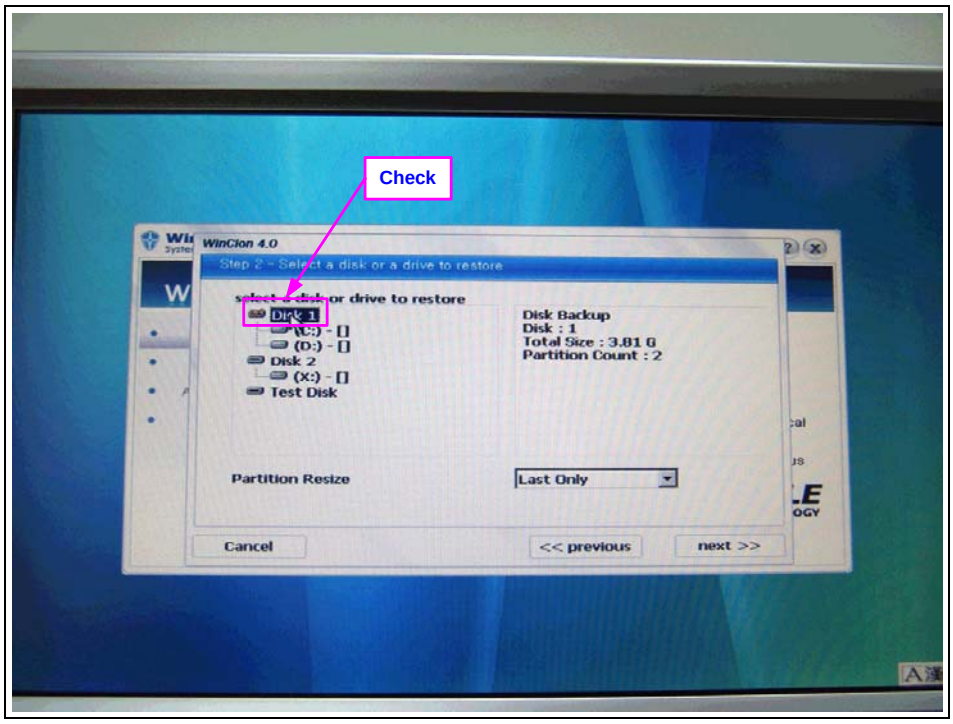
Select the partition you want to restore.

In this example, we will restore the entire disk.



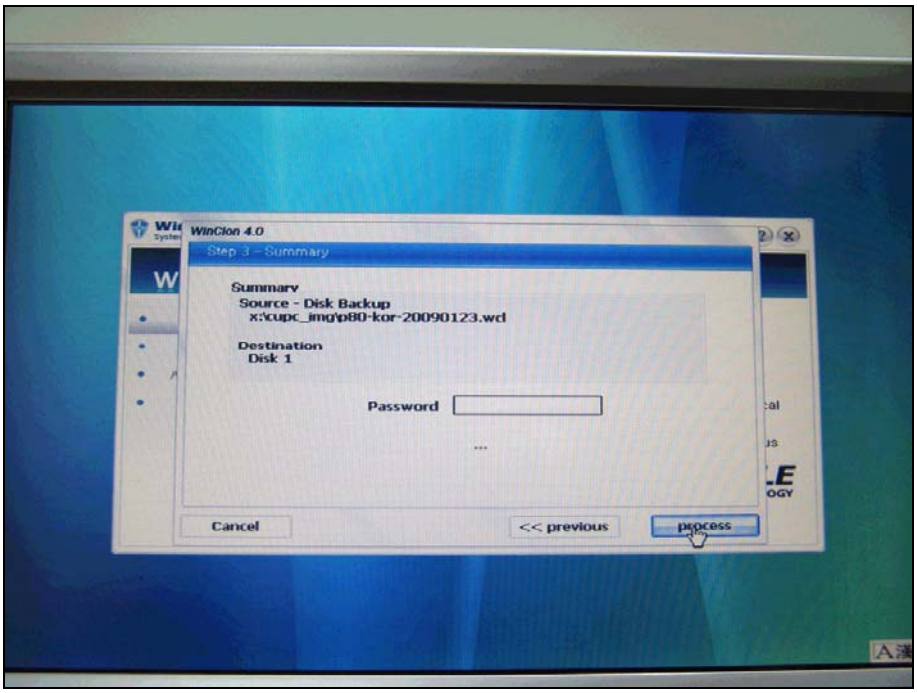
[Figure 23] Selecting the restoring partition

Click the 'Next' button and select the disk to restore, i.e. Disk1.



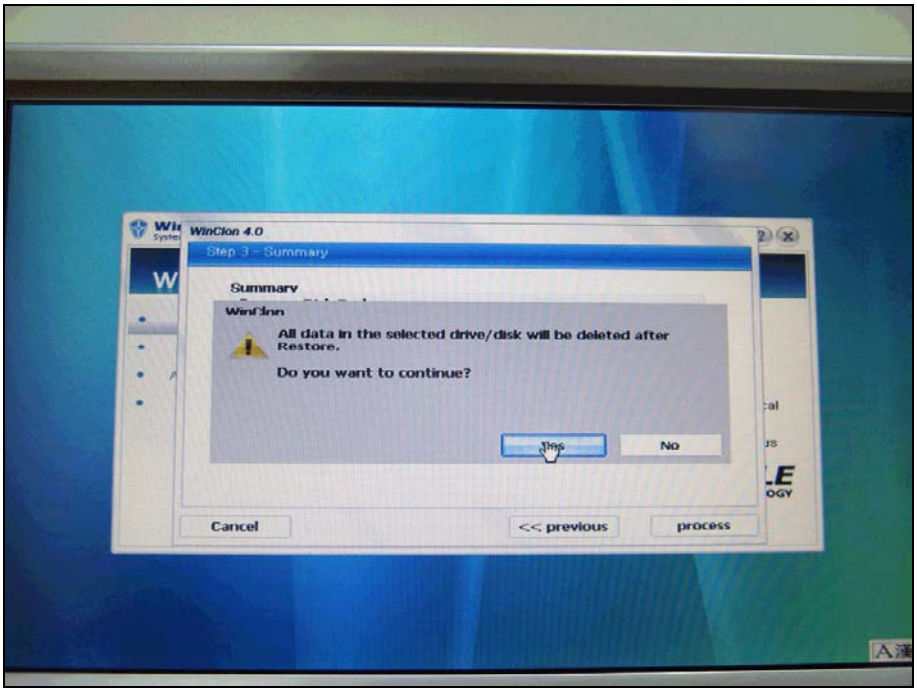
[Figure 24] Selecting the restoring disk

Click 'Next'.



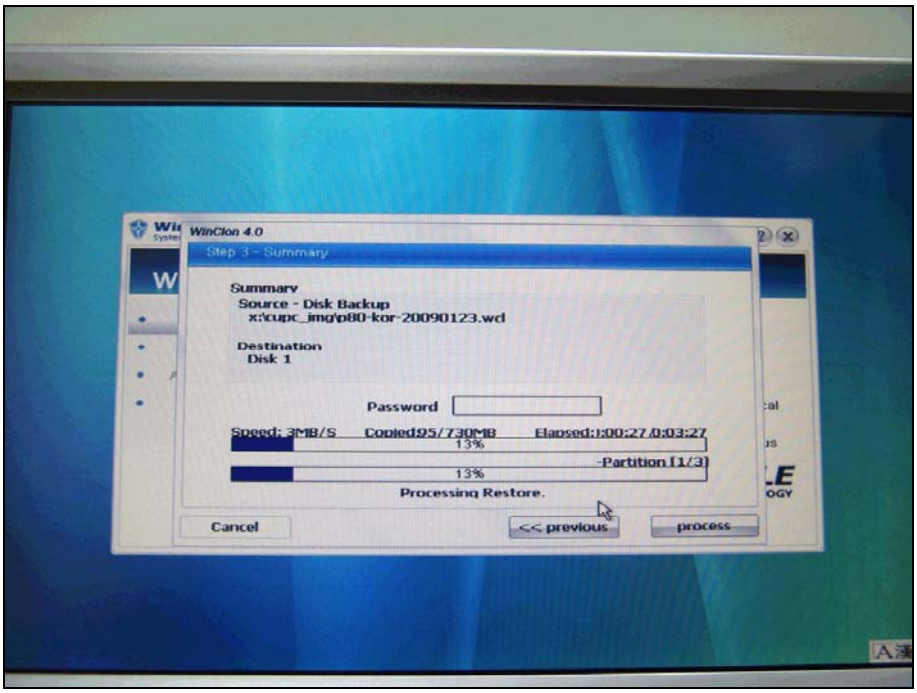
[Figure 25] Restoring Summary Screen

Click 'Process'.



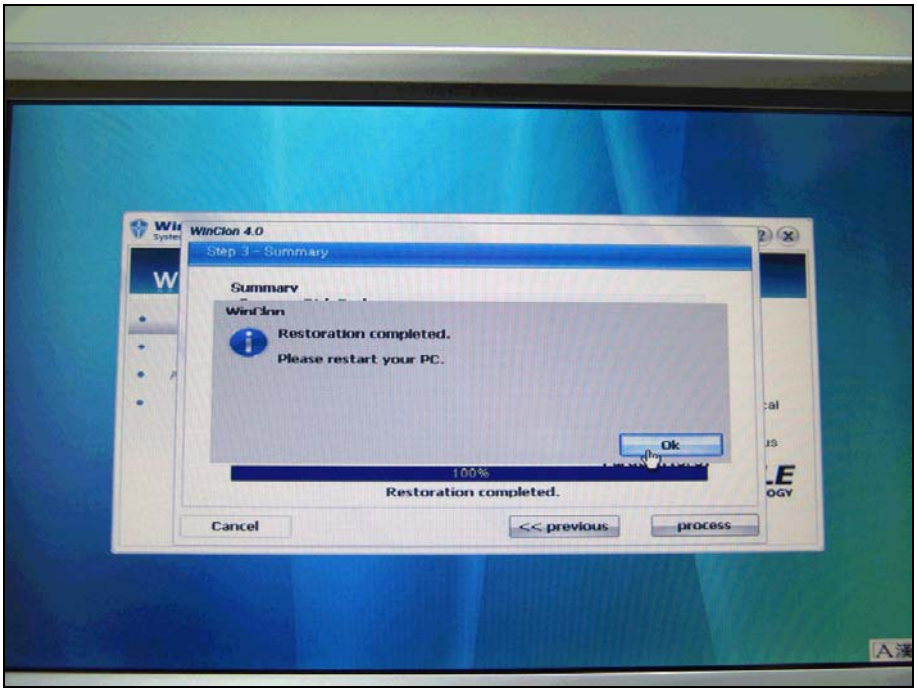
[Figure 26] Continue Screen

Click 'Yes' to confirm.



[Figure 27] Restoration Progress Screen

The restoration process will begin. It will take about 4~5 minutes.



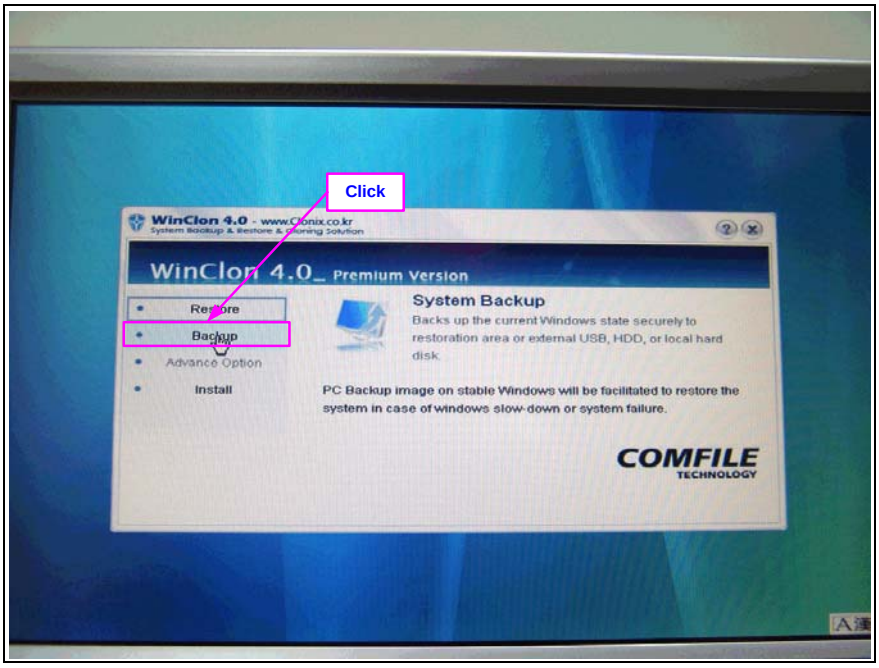
[Figure 28] Restoration Complete

After the restoration is complete, refer to the chapter 7-2-1 to change the CUPC First Boot Device to HDD-0 and reboot.

7-5. Backing Up

You can also use the WinClon utility to backup the system after customizing it to the state you want. This will allow you to restore to your custom state rather than the original state.

On the initial WinClon screen, click 'Backup'.


Click
WinClon 4.0 - www.Clonix.co.kr
System Backup & Restore & Cloning Solution
WinClon 4.0_ Premium Version
Restore
Backup
Advance Option
Install
System Backup
Backs up the current Windows state securely to restoration area or external USB, HDD, or local hard disk.
PC Backup image on stable Windows will be facilitated to restore the system in case of windows slow-down or system failure.
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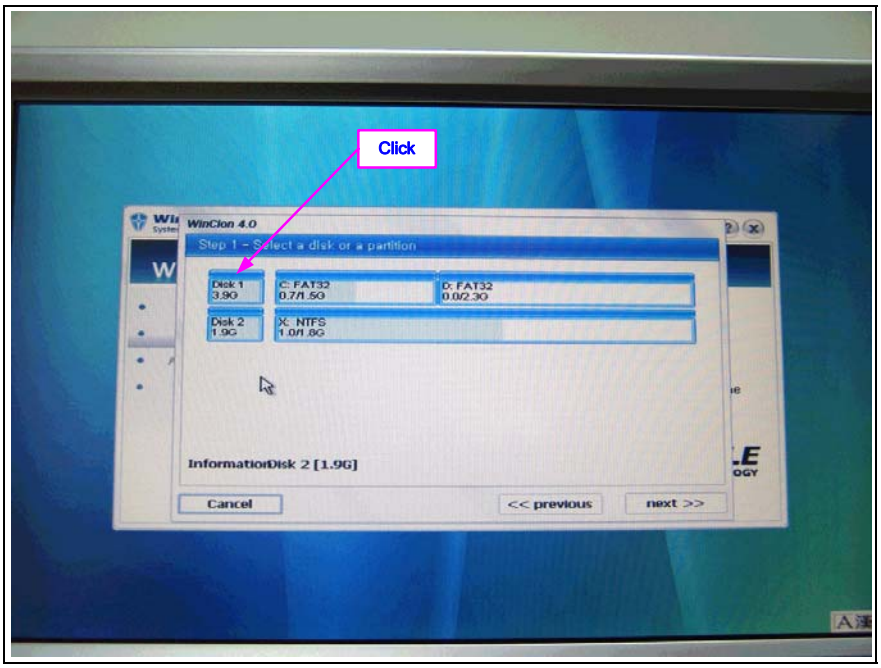
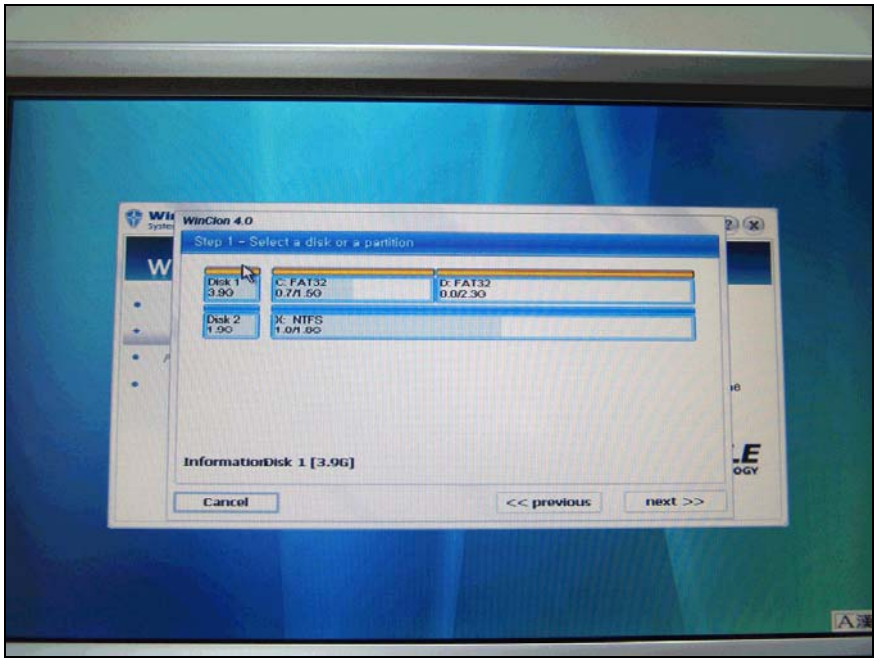
[Figure 29] Selecting Backup Menu

Select the disk or partition to back up. In this example we will backup the entire disk.



[Figure 30] Selecting the partition and disk to back up

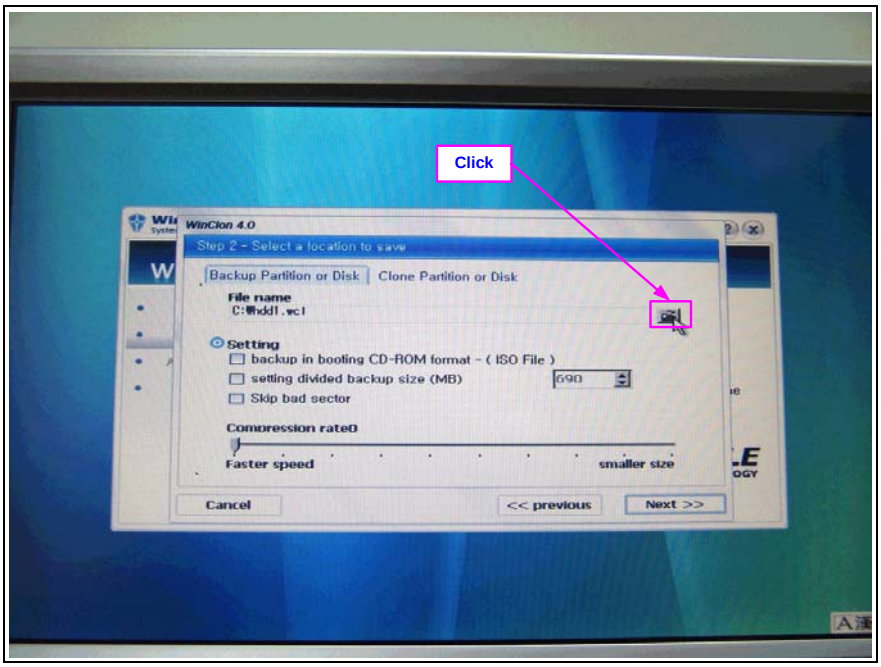
Confirm the selected partition and/or disk.



[Figure 31] Confirm the partition and disk to back up

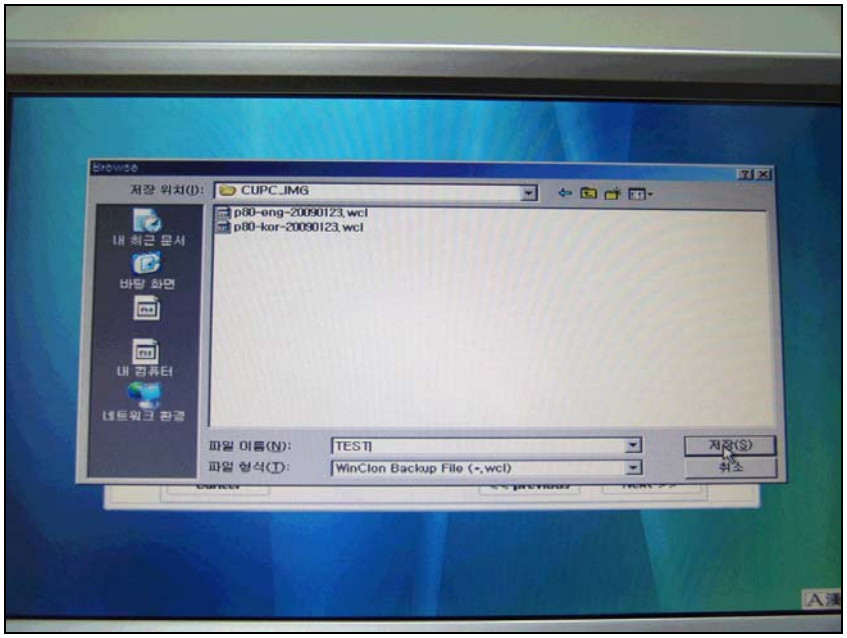
You are now ready to save the disk to an image file.

Click the folder icon to locate the image file for saving.



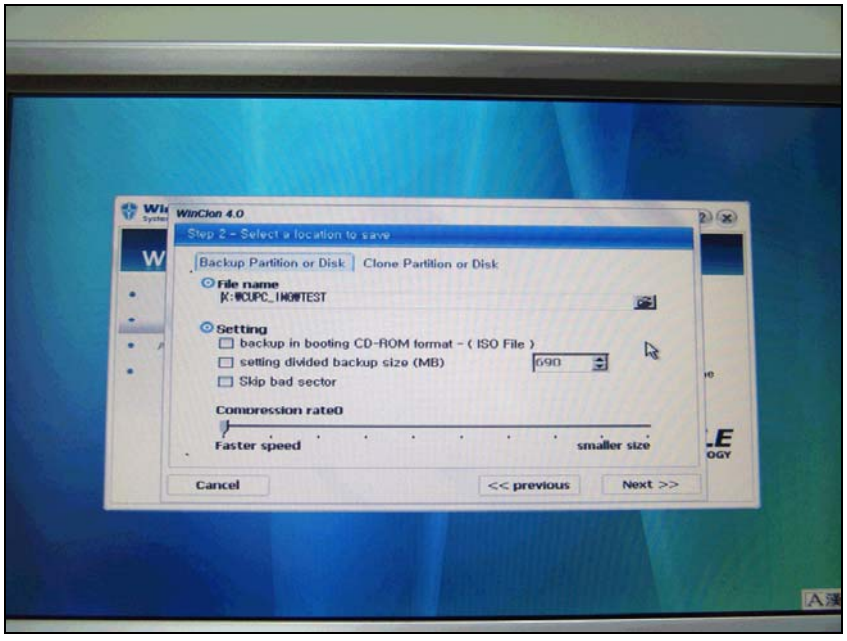
[Figure 32] Selecting folder icon

Select the folder and enter a desired file name. Then click the 'Save' button.



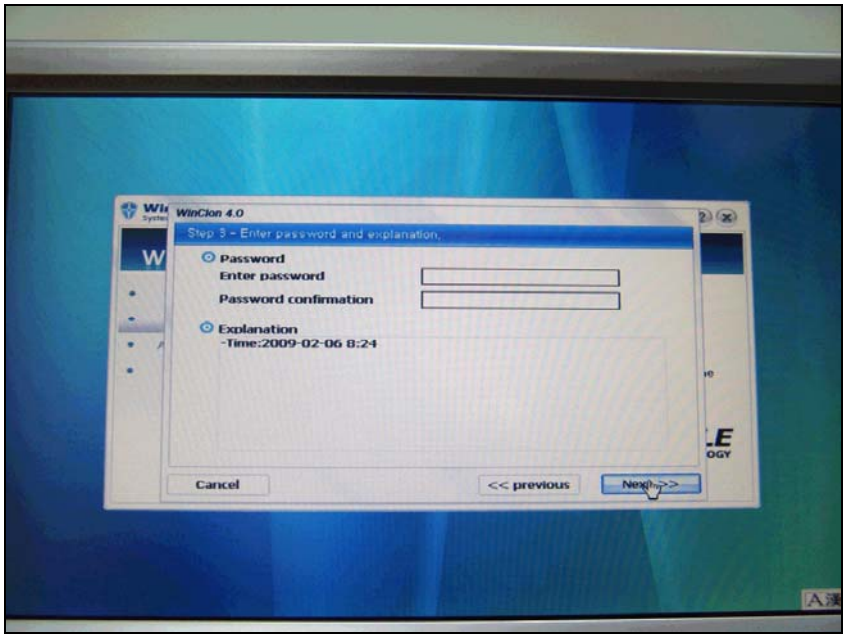
[Figure 33] Input the image file name

Click 'Next'.



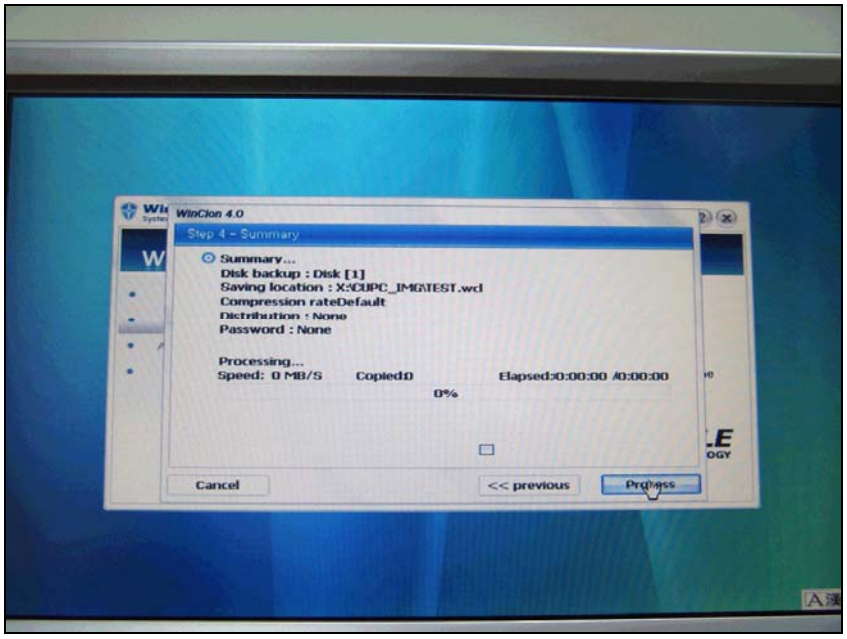
[Figure 34] Image file determined

If you want to protect your image, entered your password and click 'Next'.



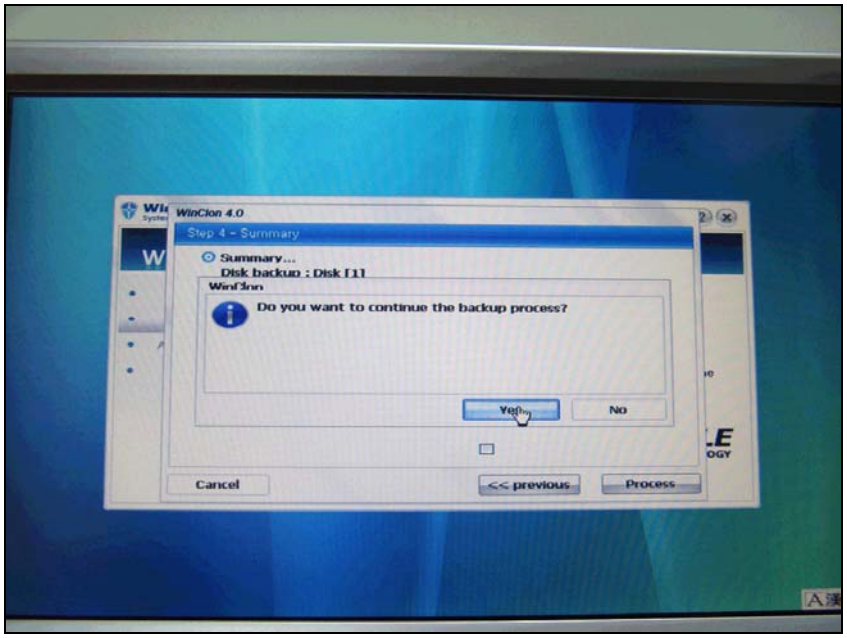
[Figure 35] Password set

Click 'Process'.



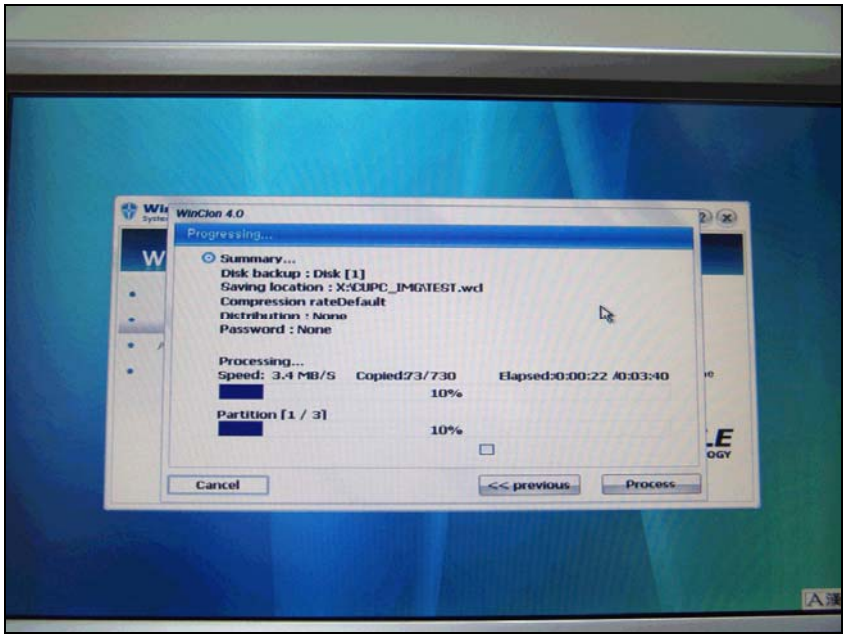
[Figure 36] Backup Summary Screen

Click 'Yes' to confirm.



[Figure 37] Backup Start Confirmation Screen

The backup process will begin. It will take about 5~6 minutes.



[Figure 38] Backup Progress Screen

When the backup process is finished WinClon will display the newly created image file. To fishish, click 'OK'.

[Figure 39] Backup Complete

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